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## SEQUENCE LISTING

<110> diaDexus, Inc.  
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 Sun, Yongming  
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 Chen, Huei-Mei

<120> Compositions, Splice Variants and Methods Relating to Ovarian  
 Specific Genes and Proteins

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a 1921

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<210> 7
<211> 1469
<212> DNA
<213> Homo sapien

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<400> 7
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gatgaaaact taaccttggg attaattatg agactgctca gaggaagaga atgggagaca 240
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ctagcatggc aaacaggcag taaacagccc attctggctg ctgtattgag aagagaatgt 480

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17

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ggtggacaga tatagaagca tggaaacctg atagggctat tgcaatcact cagaaaagag      540
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gaagggttaat ttgatcacca atggccaatg atgtaatcag ttatgcctat gtaatgaagc      660
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<210> 8  
<211> 1268  
<212> DNA  
<213> Homo sapien

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<400> 8
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ggacaaagga agggagaggg gtggagggac agaaaggaag aggaaggatg gaggaaggaa    180
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cctctgcagc accacccatg ctgccctca gctcttcccg ctgctctcac tcctgaacac    540
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18

```

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aacacgcc                                         1268

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<210> 9
<211> 1328
<212> DNA
<213> Homo sapien

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<400> 9
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19

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<210> 10
<211> 2061
<212> DNA
<213> Homo sapien

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<400> 10
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20

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<210> 11
<211> 1826
<212> DNA
<213> Homo sapien

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<400> 11
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21

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&lt;210&gt; 12

&lt;211&gt; 1106

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 12

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22

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<210> 13  
 <211> 943  
 <212> DNA  
 <213> Homo sapien

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23

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 <211> 487  
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 <213> Homo sapien

<400> 14  
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 aaaaaaa 487

<210> 15  
 <211> 3870  
 <212> DNA  
 <213> Homo sapien

<400> 15  
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25

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&lt;210&gt; 16

&lt;211&gt; 3289

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 16

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26

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&lt;210&gt; 17

&lt;211&gt; 1390

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 17

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<210> 18
<211> 1363
<212> DNA
<213> Homo sapien

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<400> 18
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agtatgaagg agacgtgcca gctggaaata caggtagaca atgaacaact gaatttagag      180
gacgaagaca ttgaaagcat tgatgccacc aaattgagcc gtttcattga gatcaacagc      240
ctccacatgg tgacagagta caaccctgtg actgtgattg gggtattcaa cagcgtaatt      300
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aatcgtgaat cagaaggaaa gactccaaag gtggaactct gacttctcct tggaaactaca      660
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<210> 19
<211> 2382
<212> DNA
<213> Homo sapien

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<400> 19
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&lt;210&gt; 20

&lt;211&gt; 377

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 20

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ctggacctac aaggcatccg aatcgactca gatattagcg gcaacctcaa gtttgctgt 120

gagagcattg tggaggaata cgaggatgaa ctcatgaaat tcttttcccg agaggctgac 180

31

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<210> 21
<211> 1056
<212> DNA
<213> Homo sapien

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<400> 21
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<210> 22
<211> 772
<212> DNA
<213> Homo sapien

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<400> 22
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32

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<210> 23
<211> 1594
<212> DNA
<213> Homo sapien

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<400> 23
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aggaaacccc ctcggttca ggacttccgc tgcttagctg tgctgggccg gggacacttt      180
gggaaggtag tgggctgaag aggggtggtat gggacaggat tgggggcctc atcacatgag      240
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caaggaaggg atcggttctg gggaccggac tagcaccttc tgtggcacc cggagttcct      780
ggctcccag gtgctgacct aggaggcata cacacgggct gtggactggg gggggctggg      840
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33

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ggtgtttgac tgcacgtca acatggacgc cccctacccc ggctttctgt cggtgcaagg 960
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<210> 24
<211> 2365
<212> DNA
<213> Homo sapien

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<400> 24
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34

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<210> 25  
 <211> 988  
 <212> DNA  
 <213> Homo sapien

<400> 25  
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35

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caagcgccac tttatccagg acagctgtct ctgagtgtc acccaacctg gggccctgga      540
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&lt;210&gt; 26

&lt;211&gt; 1591

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 26

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ctcccagctg cagatccagt ttcagggtgg cttctccagt cgcgggggct gcctggaagg      600
ttcacagggc actcaggctc tccacaagat tgtagatttc taccctgagg acaacaactc      660
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36

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<210> 27
<211> 1193
<212> DNA
<213> Homo sapien

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<400> 27
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37

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<210> 28
<211> 598
<212> DNA
<213> Homo sapien

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<400> 28
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<210> 29
<211> 1696
<212> DNA
<213> Homo sapien

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<400> 29
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<210> 30

<211> 1939

<212> DNA

<213> Homo sapien

<400> 30

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 cagtctcag tcaccttgga caaagaagtg tggatcctca gattccatct tttccaactc 180  
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ctcccaggca ctcatttata ttgctctgaa agagctttcc aaagtattta aaaataaaaa 1920
caagttttct tacactggg 1939

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40

&lt;211&gt; 2082

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 31

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41

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&lt;211&gt; 1081

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 32

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&lt;210&gt; 33

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&lt;211&gt; 1075

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 33

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&lt;210&gt; 34

&lt;211&gt; 672

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 34

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<210> 35
<211> 2184
<212> DNA
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 <213> Homo sapien

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 <213> Homo sapien

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47

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<212> DNA
<213> Homo sapien

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48

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<212> DNA
<213> Homo sapien

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<212> DNA
<213> Homo sapien

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52

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&lt;211&gt; 2267

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 41

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53

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&lt;210&gt; 42

&lt;211&gt; 415

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 42

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54

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&lt;210&gt; 43

&lt;211&gt; 1805

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 43

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55

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<213> Homo sapien

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<222> (772)..(772)
<223> n=a, c, g or t

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<220>
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<223> n=a, c, g or t

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&lt;213&gt; Homo sapien

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71

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&lt;211&gt; 1829

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 53

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 <213> Homo sapien

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74

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<212> DNA  
<213> Homo sapien

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75

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&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 57

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79

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<211> 1004  
<212> DNA  
<213> Homo sapien

<400> 58  
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<210> 59  
<211> 1233  
<212> DNA  
<213> Homo sapien

<400> 59  
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80

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<210> 60
<211> 1112
<212> DNA
<213> Homo sapien

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<400> 60
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81

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<210> 61  
 <211> 478  
 <212> DNA  
 <213> Homo sapien

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<400> 61
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aagaagcttg gctggggcag aaataaacca tattggtcgg taaaaaact ctgagcct 478

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<210> 62  
 <211> 5650  
 <212> DNA  
 <213> Homo sapien

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<400> 62
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82

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84

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<210> 63
<211> 443
<212> DNA
<213> Homo sapien

<400> 63

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85

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<210> 64  
 <211> 359  
 <212> DNA  
 <213> Homo sapien

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<400> 64
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aaagaagctt ggctggggca gaaataaacc atattggtcg gtaaaaaaac tctgagcct      359

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<210> 65  
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 <212> DNA  
 <213> Homo sapien

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<400> 65
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86

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&lt;210&gt; 66

&lt;211&gt; 1519

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 66

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&lt;210&gt; 68

&lt;211&gt; 575

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 68

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<212> DNA  
<213> Homo sapien

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90

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&lt;210&gt; 71

&lt;211&gt; 2458

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 71

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91

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&lt;211&gt; 5495

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 72

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92

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94

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&lt;210&gt; 73

&lt;211&gt; 4927

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 73

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95

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97

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&lt;211&gt; 3012

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 74

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98

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&lt;210&gt; 77

&lt;211&gt; 991

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 77

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101

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&lt;210&gt; 78

&lt;211&gt; 1675

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 78

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102

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104

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 <213> Homo sapien

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105

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&lt;210&gt; 83

&lt;211&gt; 2606

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 83

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106

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 <213> Homo sapien

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107

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<212> DNA

108

&lt;213&gt; Homo sapien

&lt;400&gt; 85

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&lt;210&gt; 86

&lt;211&gt; 847

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 86

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109

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aaggtggatc cattgaagcc caggaagttg gagaccaggt ctgggcaaca atggggggaga 780
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<210> 87
<211> 1389
<212> DNA
<213> Homo sapien

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110

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<211> 3429
<212> DNA
<213> Homo sapien

<400> 88
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112

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113

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<213> Homo sapien

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<212> DNA
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114

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&lt;210&gt; 92

&lt;211&gt; 2396

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 92

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115

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&lt;210&gt; 93

&lt;211&gt; 1813

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 93

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116

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1813

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<212> DNA  
<213> Homo sapien



117

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118

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<211> 2387

<212> DNA

<213> Homo sapien

<400> 95

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gcagagttgt ggagctgggc tgggctgggg ggagcgggc cccggccctc ggccccgaa 960

acgggcataa tagggagggg accaagaggc cgcgctttcc agcgtggaga ccggacgggtg 1020

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actgtcattt gctcaaagct ggctgccaaa tgtttgggtga tgaaggcaga aatgaatggc 1260

tcaaaacttg ggagaagagc aaaacctgaa ggggccctcc agaacaatga tgggctttat 1320

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119

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ctggatccaa aatttatcac gagtattttg tatgagaata atgttatcac tattgatctg 1620
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tttgaaaaag atgttaaagg tgaatccttg ttctattcta agaaaatgga cctgacagta 1740
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```

&lt;210&gt; 96

&lt;211&gt; 1528

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 96

```

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acgccctccc gcgagtccg gggccctccc gcgccctct tctggcgcg cgcgagcat 180
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cacgagtatt ttgtatgaga ataatgttat cactattgat ctggttcaaa attcttctca 780

```

120

```

aaaaactcag aatgatgtgg acatagctga tgtggcttat tattttgaaa aagatgttaa      840
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tctggatcct ggtcaaactt taatttatta tgttgatgaa aaagcacctg aattctcaat      960
gcagggtcta aaagctgggtg ttattgctgt tattgtgggt gtggtgatag cagttgttgc     1020
tggaattggt gtgctgggtta tttccagaaa gaagagaatg gcaaagtatg agaaggctga     1080
gataaaggag atgggtgaga tgcataggga actcaatgca taactatata atttgaagat     1140
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```

&lt;210&gt; 97

&lt;211&gt; 748

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 97

```

tcgccctttc gagcggcgcc cgggcaggta ctccgtgtgg atcggcggct ccatcctggc      60
ctcgtgtgcc accttcagc agatgtggat cagcaagcag gagtatgacg agtccggccc     120
ctccatcgtc caccgcaa at gcttctaggc ggactatgac ttagttgcgt tacacccttt     180
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cgggtgaagg gacagcagtc ggttggagcg agcatcccc aaagttcaca atgtggccga     360
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```

&lt;210&gt; 98

121

&lt;211&gt; 2221

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 98

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agaaggatct gggggagcag ccaggacgag gcggagctga tccgagagga catccagggg	180
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122

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a 2221

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<210> 99
<211> 1683
<212> DNA
<213> Homo sapien

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<400> 99
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123

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cag 1683

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<210> 100
<211> 1735
<212> DNA
<213> Homo sapien

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<400> 100
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ccgccctcgg aggccgagta caccgacgtg ctgcagaaga tcaagtacgc cttcagcctg 240
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cggcggccgc atctgacatc ggatgccgtg gcgctgctgc gggacaacgt cactccacgt 420
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124

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&lt;210&gt; 101

&lt;211&gt; 1961

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 101

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125

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&lt;210&gt; 102

&lt;211&gt; 1916

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 102

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 ctggcccggc tgcgcggcaa catcgccgac ccctcctctc cggagctgtt gcacttcctt 300  
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 cggcggccgc atctgacatc ggatgccgtg gcgctgctgc gggacaacgt cactccacgt 420

126

gaaaacgagc tctggacctc gctggggggac tctgtggaccc gccccgggct ggagctgtcc 480  
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 gacccgcaga gccgcgcctg ggaggaccca gttgagaaac agctacagca cgagcggagg 600  
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&lt;210&gt; 103

&lt;211&gt; 1735

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 103

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127

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&lt;211&gt; 1821

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 104

128

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130

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131

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&lt;210&gt; 107

&lt;211&gt; 1243

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 107

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132

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133

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&lt;210&gt; 109

&lt;211&gt; 2690

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 109

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134

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&lt;210&gt; 110

135

&lt;211&gt; 1982

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 110

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136

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<213> Homo sapien

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137

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 <213> Homo sapien

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138

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<212> DNA  
<213> Homo sapien

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139

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&lt;210&gt; 114

&lt;211&gt; 1039

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 114

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140

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141

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142

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<211> 4018
<212> DNA
<213> Homo sapien

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143

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144

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&lt;211&gt; 893

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 117

145

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&lt;210&gt; 118

&lt;211&gt; 896

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 118

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146

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147

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&lt;210&gt; 120

&lt;211&gt; 1916

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 120

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148

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<210> 121
<211> 1627
<212> DNA
<213> Homo sapien

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149

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&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 122

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&lt;400&gt; 123

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&lt;213&gt; Homo sapien

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&lt;400&gt; 125

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157

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158

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159

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&lt;210&gt; 127

&lt;211&gt; 2665

&lt;212&gt; DNA

&lt;213&gt; Homo sapien

&lt;400&gt; 127

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160

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161

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162

&lt;210&gt; 129

&lt;211&gt; 438

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 129

Pro Val Pro Ala Leu Cys Pro Ser Pro Trp Pro Cys Pro Pro Ala Cys  
 1 5 10 15

Pro Ala Pro Ser Gly Pro Pro Ser Leu Asn Ser Ile Pro Leu Ala Leu  
 20 25 30

Phe His Ser Glu Glu Pro His Gly Cys Phe Ser Leu Ala Glu Arg Pro  
 35 40 45

Ser Pro Pro Lys Ala Trp Asp Gln Leu Arg Ala Val Ser Gly Gly Ser  
 50 55 60

Pro Glu Arg Arg Thr Pro Trp Lys Pro Pro Pro Ser Asp Leu Tyr Gly  
 65 70 75 80

Asp Leu Lys Ser Arg Arg Asn Ser Val Ala Ser Pro Thr Ser Pro Thr  
 85 90 95

Arg Ser Leu Pro Arg Ser Ala Ser Ser Phe Glu Gly Arg Ser Val Pro  
 100 105 110

Ala Thr Pro Val Leu Thr Arg Gly Ala Gly Pro Gln Leu Cys Lys Pro  
 115 120 125

Glu Gly Leu His Ser Arg Gln Trp Ser Gly Ser Gln Asp Ser Gln Met  
 130 135 140

Gly Phe Pro Arg Ala Asp Pro Ala Ser Asp Arg Ala Ser Leu Phe Val  
 145 150 155 160

Ala Arg Thr Arg Arg Ser Asn Ser Ser Glu Ala Leu Leu Val Asp Arg  
 165 170 175

Ala Ala Gly Gly Gly Ala Gly Ser Pro Pro Ala Pro Leu Ala Pro Ser  
 180 185 190

Ala Ser Gly Pro Pro Val Cys Lys Ser Ser Glu Val Leu Tyr Glu Arg  
 195 200 205

Pro Gln Pro Thr Pro Ala Phe Ser Ser Arg Thr Ala Gly Pro Pro Asp

163

210		215		220
Pro Pro Arg Ala Ala Arg Pro Ser Ser Ala Ala Pro Ala Ser Arg Gly				
225		230		235 240
Ala Pro Arg Leu Pro Pro Val Cys Gly Asp Phe Leu Leu Asp Tyr Ser				
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Leu Asp Arg Gly Leu Pro Arg Ser Gly Gly Gly Thr Gly Trp Gly Glu				
	260		265	270
Leu Pro Pro Ala Ala Glu Val Pro Gly Pro Leu Ser Arg Arg Asp Gly				
	275		280	285
Leu Leu Thr Met Leu Pro Gly Pro Pro Pro Val Tyr Ala Ala Asp Ser				
	290		295	300
Asn Ser Pro Leu Leu Arg Thr Lys Asp Pro His Thr Arg Ala Thr Arg				
	305	310		315 320
Thr Lys Pro Cys Gly Leu Pro Pro Glu Ala Ala Glu Gly Pro Glu Val				
	325		330	335
His Pro Asn Pro Leu Leu Trp Met Pro Pro Pro Thr Arg Ile Pro Ser				
	340		345	350
Ala Gly Glu Arg Ser Gly His Lys Asn Leu Ala Leu Glu Gly Leu Arg				
	355		360	365
Asp Trp Tyr Ile Arg Asn Ser Gly Leu Ala Ala Gly Pro Gln Arg Arg				
	370		375	380
Pro Val Leu Pro Ser Val Gly Pro Pro His Pro Pro Phe Leu His Ala				
	385	390		395 400
Arg Cys Tyr Glu Val Gly Gln Ala Leu Tyr Gly Ala Pro Ser Gln Ala				
	405		410	415
Pro Leu Pro His Ser Arg Ser Phe Thr Ala Pro Pro Val Ser Gly Arg				
	420		425	430
Tyr Gly Gly Cys Phe Tyr				
	435			

&lt;210&gt; 130

&lt;211&gt; 237

164

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 130

Met Glu Val Lys Gly Gln Leu Ile Ser Ser Pro Thr Phe Asn Ala Pro  
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Ala Ala Leu Phe Gly Glu Ala Ala Pro Gln Val Lys Ser Glu Arg Leu  
 20 25 30

Arg Gly Leu Leu Asp Arg Gln Arg Thr Leu Gln Glu Ala Leu Ser Leu  
 35 40 45

Lys Leu Gln Glu Leu Arg Lys Val Cys Leu Gln Glu Ala Glu Leu Thr  
 50 55 60

Gly Gln Leu Pro Pro Glu Cys Pro Leu Glu Pro Gly Glu Arg Pro Gln  
 65 70 75 80

Leu Val Arg Arg Arg Pro Pro Thr Ala Arg Ala Tyr Pro Pro Pro His  
 85 90 95

Pro Asn Gln Ala His His Ser Leu Cys Pro Ala Glu Glu Leu Ala Leu  
 100 105 110

Glu Ala Leu Glu Arg Glu Val Ser Val Gln Gln Gln Ile Ala Ala Ala  
 115 120 125

Ala Arg Arg Leu Ala Leu Ala Pro Asp Leu Ser Thr Glu Gln Arg Arg  
 130 135 140

Arg Arg Arg Gln Val Gln Ala Asp Ala Leu Arg Arg Leu His Glu Leu  
 145 150 155 160

Glu Glu Gln Leu Arg Asp Val Arg Ala Arg Leu Gly Leu Pro Val Leu  
 165 170 175

Pro Leu Pro Gln Pro Leu Pro Leu Ser Thr Gly Ser Val Ile Thr Thr  
 180 185 190

Gln Gly Val Cys Leu Gly Met Arg Leu Ala Gln Leu Ser Gln Gly Glu  
 195 200 205

His Pro Leu Val Arg Val Gly Glu Trp Thr Leu Ala Asn Gly Arg Gly  
 210 215 220



165

Arg Ala Gly Met Gly Asp Trp Pro Val Lys Thr Gly Arg  
 225 230 235

<210> 131  
 <211> 233  
 <212> PRT  
 <213> Homo sapien

<400> 131

Met Pro Phe Gln Lys Gly Met Pro Phe Asp Leu Cys Phe Leu Val Gln  
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Ser Ser Asp Phe Lys Val Met Val Asn Gly Ile Leu Phe Val Gln Tyr  
 20 25 30

Phe His Arg Val Pro Phe His Arg Val Asp Thr Ile Ser Val Asn Gly  
 35 40 45

Ser Val Gln Leu Ser Tyr Ile Ser Phe Gln Pro Pro Gly Val Trp Pro  
 50 55 60

Ala Asn Pro Ala Pro Ile Thr Gln Thr Val Ile His Thr Val Gln Ser  
 65 70 75 80

Ala Pro Gly Gln Met Phe Ser Thr Pro Ala Ile Pro Pro Met Met Tyr  
 85 90 95

Pro His Pro Ala Tyr Pro Met Pro Phe Ile Thr Thr Ile Leu Gly Gly  
 100 105 110

Leu Tyr Pro Ser Lys Ser Ile Leu Leu Ser Gly Thr Val Leu Pro Ser  
 115 120 125

Ala Gln Arg Phe His Ile Asn Leu Cys Ser Gly Asn His Ile Ala Phe  
 130 135 140

His Leu Asn Pro Arg Phe Asp Glu Asn Ala Val Val Arg Asn Thr Gln  
 145 150 155 160

Ile Asp Asn Ser Trp Gly Ser Glu Glu Arg Ser Leu Pro Arg Lys Met  
 165 170 175

Pro Phe Val Arg Gly Gln Ser Phe Ser Val Trp Ile Leu Cys Glu Ala  
 180 185 190

His Cys Leu Lys Val Ala Val Asp Gly Gln His Leu Phe Glu Tyr Tyr  
 195 200 205

166

His Arg Leu Arg Asn Leu Pro Thr Ile Asn Arg Leu Glu Val Gly Gly  
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Asp Ile Gln Leu Thr His Val Gln Thr  
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<210> 132  
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 <212> PRT  
 <213> Homo sapien

<400> 132

Met Glu Lys Ser Gly Arg Arg Trp Leu Ala Ser Ala Ala Pro Pro Leu  
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Gly Arg Leu Arg Arg Arg Glu Ser Gly Ala Glu Gln Gly Gly Leu Ser  
 20 25 30

Val Arg Ala Thr Arg Val Ser Leu Val Arg Ser Ala Leu Asp Cys Ala  
 35 40 45

Pro Arg Ser Gly Val Arg Arg Pro Gly Ser Cys Phe Cys Arg Cys Arg  
 50 55 60

Arg Arg Ile Pro Val Ala Arg Arg Ala Arg Leu Pro Gln Ala Cys Ser  
 65 70 75 80

Gln His Arg Thr Glu Pro Ser Gly Gly Arg Gly Trp Ser Ala Arg Pro  
 85 90 95

Ala Trp Glu Arg Gln Gly Arg Arg Cys Asn Leu Leu Thr Ala Lys Lys  
 100 105 110

Pro Gly Glu  
 115

<210> 133  
 <211> 151  
 <212> PRT  
 <213> Homo sapien

<400> 133

Arg Asn Glu Tyr Gln Leu Met Leu Thr Arg Tyr Leu Asp Phe Glu Gly  
 1 5 10 15

Leu Pro Ser Lys Leu Trp His Glu Ser Val Arg His Gly Phe Leu His

167

20

25

30

Ser Ser Asp Asn Leu Phe Phe Gln Asn Gly Phe Leu Leu Leu Leu  
 35 40 45

Leu Thr Asn Ser Lys His Pro Val Leu Leu Phe Val Leu Phe Val Leu  
 50 55 60

Phe Cys Phe Val Leu Phe Cys Leu Pro Phe Arg Lys Val Leu Phe Arg  
 65 70 75 80

Val Gly Ile Asp Cys Ser Leu Glu Thr Leu Ser Ser Val Cys Ala Gly  
 85 90 95

Ser Val His Ala Leu Tyr Glu Phe Gly Leu Asn Asn Ala Phe Glu Val  
 100 105 110

Thr Trp Asp Val Gln Phe Trp His Val Phe Ile Asp Cys Val Phe Lys  
 115 120 125

His Val Ser Cys Phe Met Ser Phe Ser Lys Pro His Phe Thr Ser Tyr  
 130 135 140

Ser Glu Lys Leu Ile Lys Glu  
 145 150

<210> 134  
 <211> 699  
 <212> PRT  
 <213> Homo sapien

<400> 134

Met Arg His Ser Ile Ser Asn Leu Lys Lys Lys Lys Lys Lys Lys  
 1 5 10 15

Lys Thr Ser Gly Lys Lys Val Arg Gly Ile Leu Ser Leu Lys Leu Val  
 20 25 30

Ser Glu Gly Thr Gly Glu Glu Lys Thr Thr Val Pro Asn Glu Lys Arg  
 35 40 45

Thr Gly Asn Leu Ile Leu Ile Gly Met His Gln Ile Leu Leu Cys Thr  
 50 55 60

Phe Ala Ser Ser Ile Ser Arg Arg Ile Val Gln Asn Val Tyr Phe Leu  
 65 70 75 80

168

Pro Met Leu Arg Lys Gln Val Tyr Arg Thr Tyr Ser Gly Leu Ile Ala  
 85 90 95

Ser Glu Trp Gln Ile Arg Ile Gly Ile Gln Ser Pro Cys Cys Gly Leu  
 100 105 110

Leu Gln Gln Glu Asn Gln Ala Thr Gln Met Ile Leu Phe Ser Leu Phe  
 115 120 125

Gly Phe Val Lys Cys His Leu Val Leu Phe Pro Ser Asn Ile Glu Glu  
 130 135 140

Val Val Gly Leu Lys Leu Trp Asp Leu His Tyr Ala Tyr Thr Phe Leu  
 145 150 155 160

Phe Met Pro Leu Phe Arg Glu Ala Asp Tyr Cys Phe Phe Lys Met Met  
 165 170 175

His Trp Arg Arg Cys Glu Ser Lys Ile Ala Thr Trp His Tyr Leu Pro  
 180 185 190

Arg Ile Asn Glu Lys Gly Lys Lys Thr Ile Phe Ser Phe Phe Lys His  
 195 200 205

Phe Ser Glu Lys Ile Gln Leu Pro Phe Leu Ile Gly Glu Arg His His  
 210 215 220

Ala Arg Leu Ile Phe Ala Phe Leu Val Glu Thr Gly Phe His His Val  
 225 230 235 240

Gly Gln Asp Gly Leu Asp Leu Leu Ile Ser Cys Ser Ala His Leu Gly  
 245 250 255

Leu Leu Ser Ala Gly Ile Thr Gly Met Ser His Cys Ala Arg Ser Thr  
 260 265 270

Ile Leu Phe Ser Val Ser His Pro Tyr Gln Ile Ile Glu Pro Ser Val  
 275 280 285

Cys Met Phe Leu Asn Leu Val Tyr Asn Ser Thr Ser Leu Thr Tyr Lys  
 290 295 300

Ser Thr Ile Ser Tyr Glu Phe Phe Ile Glu Val Gly Ser Ile Leu Lys  
 305 310 315 320

169

Trp Thr Glu Asn Leu Ile Pro Gly Arg Ala Arg Trp Leu Met Pro Val  
 325 330 335

Ile Pro Tyr Phe Gly Arg Pro Arg Trp Val Asp His Leu Arg Leu Gly  
 340 345 350

Val Arg Asp Gln Pro Gly Gln His Gly Glu Thr Pro Ser Leu Leu Lys  
 355 360 365

Asn Thr Lys Ile Ser Gln Ala Trp Trp Leu Ser Val Ile Pro Ala Asn  
 370 375 380

Gly Glu Ala Glu Ala Gln Glu Ser Leu Glu Pro Glu Glu Ala Glu Val  
 385 390 395 400

Ala Val Ser Arg Asp His Thr Thr Ala Leu His Pro Gly Gln Trp Ser  
 405 410 415

Glu Thr Leu Ser Gln Lys Ile Ile Asn Glu Asp Met Ile Pro Ala Cys  
 420 425 430

Phe Ile Gln Leu Glu Arg His Thr Thr His Glu Ile Ile Gly Glu His  
 435 440 445

Val Asn Val Tyr Leu Leu Val Gln Leu Arg Lys Arg Glu Glu Tyr Val  
 450 455 460

Leu Val Ser Lys Val Leu Asn Lys Thr Glu Val Ala Ser Thr Val Ala  
 465 470 475 480

His Val Phe Phe Gly Leu Thr Phe Phe Phe Ser Ser Thr Phe Cys Asn  
 485 490 495

Phe Tyr Asp Leu Gly His Glu Val Leu Pro Leu Arg His Asn Gln Tyr  
 500 505 510

Pro Ser Arg Lys Gly Leu Leu Ile Pro Gly Val Lys Ile Pro Ser Leu  
 515 520 525

Arg Gly Ser His Tyr Gly Ser Pro Gly Val Lys Ile Pro Ser Ser Gln  
 530 535 540

Glu Ser Tyr Leu Gln His Leu Gly Lys Ile Pro Glu Gly Ala Thr Ser  
 545 550 555 560

Asn Arg Lys Met Lys Glu Arg Phe Asn Phe Ser Thr Gln Val Thr Asn

170

565

570

575

Pro Met His Ser Ile Val Tyr Val Ile Cys Arg Lys Gly Thr Gly Gly  
 580 585 590

Val Arg Ala Leu Trp Val Thr Ala Leu Leu Val Val Thr Phe Thr Leu  
 595 600 605

Leu Phe Leu Leu Asn Leu Trp Phe Ser Arg Leu Lys Asn Glu Ile Ile  
 610 615 620

Gly Gln Ile Asn Ser Ser Gln Pro Phe Leu Glu Gln Gln Ile Arg Leu  
 625 630 635 640

Ser Leu Lys Ser Phe Ser Lys Ile Ser Cys Phe Gln Ser Leu Pro Val  
 645 650 655

Ile Ala Ile Ile Pro Arg Leu Ile Lys Ser Val Leu Val Asn Gln Phe  
 660 665 670

Leu Tyr Phe Phe Phe Leu Ser Phe Phe Tyr Ser Val Phe Arg Tyr His  
 675 680 685

Leu Thr Asn Asn Leu Leu Leu Ile Leu Leu Arg  
 690 695

<210> 135

<211> 151

<212> PRT

<213> Homo sapien

<400> 135

Arg Asn Glu Tyr Gln Leu Met Leu Thr Arg Tyr Leu Asp Phe Glu Gly  
 1 5 10 15

Leu Pro Ser Lys Leu Trp His Glu Ser Val Arg His Gly Phe Leu His  
 20 25 30

Ser Ser Asp Asn Leu Phe Phe Gln Asn Gly Phe Leu Leu Leu Leu  
 35 40 45

Leu Thr Asn Ser Lys His Pro Val Leu Leu Phe Val Leu Phe Val Leu  
 50 55 60

Phe Cys Phe Val Leu Phe Cys Leu Pro Phe Arg Lys Val Leu Phe Arg  
 65 70 75 80

171

Val Gly Ile Asp Cys Ser Leu Glu Thr Leu Ser Ser Val Cys Ala Gly  
85 90 95

Ser Val His Ala Leu Tyr Glu Phe Gly Leu Asn Asn Ala Phe Glu Val  
100 105 110

Thr Trp Asp Val Gln Phe Trp His Val Phe Ile Asp Cys Val Phe Lys  
115 120 125

His Val Ser Cys Phe Met Ser Phe Ser Lys Pro His Phe Thr Ser Tyr  
130 135 140

Ser Glu Lys Leu Ile Lys Glu  
145 150

<210> 136  
<211> 762  
<212> PRT  
<213> Homo sapien

<400> 136

Met Gly Arg Leu Arg His Lys Asn Leu Leu Asn Leu Gly Gly Gly Gly  
1 5 10 15

Cys Ser Glu Pro Arg Ser His His Cys Thr Pro Ser Trp Ala Met Glu  
20 25 30

Arg Asp Ser Val Ser Lys Asn Asn Lys Glu Asp Met Ile Pro Ala Cys  
35 40 45

Phe Ile Gln Leu Glu Arg His Thr Thr His Glu Ile Ile Gly Glu His  
50 55 60

Val Asn Val Tyr Leu Leu Val Gln Leu Arg Lys Arg Glu Glu Tyr Val  
65 70 75 80

Leu Val Ser Lys Val Leu Asn Lys Thr Glu Val Ala Ser Thr Val Ala  
85 90 95

His Val Phe Phe Gly Leu Thr Phe Phe Phe Ser Ser Thr Phe Cys Asn  
100 105 110

Phe Tyr Asp Leu Gly His Glu Val Leu Pro Leu Arg His Asn Gln Tyr  
115 120 125

Pro Ser Arg Lys Gly Leu Leu Ile Pro Gly Val Lys Ile Pro Ser Leu

172

130							135								140
Arg	Gly	Ser	His	Tyr	Val	Ile	Pro	Arg	Ser	Lys	Asp	Ser	Tyr	Leu	Ala
145					150					155					160
Gly	Ile	Leu	Leu	Ala	His	Leu	Gly	Lys	Ile	Pro	Glu	Gly	Ala	Thr	Ser
				165					170					175	
Asn	Arg	Lys	Met	Lys	Glu	Arg	Phe	Asn	Phe	Ser	Thr	Gln	Val	Thr	Asn
			180					185					190		
Pro	Met	His	Ser	Ile	Val	Tyr	Val	Ile	Cys	Arg	Lys	Gly	Thr	Gly	Gly
		195					200					205			
Val	Arg	Ala	Leu	Trp	Val	Thr	Ala	Leu	Leu	Val	Val	Thr	Phe	Thr	Leu
		210				215						220			
Leu	Phe	Leu	Leu	Asn	Leu	Trp	Phe	Ser	Arg	Leu	Lys	Asn	Glu	Ile	Ile
225					230					235					240
Gly	Gln	Ile	Asn	Ser	Ser	Gln	Pro	Phe	Leu	Glu	Gln	Gln	Ile	Arg	Leu
				245					250					255	
Ser	Leu	Lys	Ser	Phe	Ser	Lys	Ile	Ser	Cys	Phe	Gln	Ser	Leu	Pro	Val
			260					265					270		
Ile	Ala	Ile	Ile	Pro	Arg	Leu	Ile	Lys	Ser	Val	Leu	Val	Asn	Gln	Phe
		275					280					285			
Leu	Tyr	Phe	Phe	Phe	Leu	Ser	Phe	Phe	Tyr	Ser	Val	Phe	Gln	Val	Ser
	290					295						300			
Phe	Asp	Gln	Gln	Leu	Ala	Leu	Asn	Leu	Thr	Ala	Met	Thr	Glu	Ile	Ser
305					310					315					320
Lys	Glu	Glu	Ser	Ile	Val	Val	Ile	Gly	Leu	Val	Ile	Ile	Ile	Leu	Lys
				325					330					335	
Thr	Ile	His	Tyr	Phe	Leu	Lys	Leu	Asn	Ala	Val	Cys	Leu	Ile	Ser	Val
			340					345					350		
Glu	Tyr	Asp	Lys	Asn	Val	Asn	Glu	Lys	Pro	Asn	Met	Thr	Leu	Thr	Leu
		355					360					365			
Ala	Leu	Asn	Phe	Ile	Phe	Thr	Cys	Val	Leu	Lys	Val	Leu	Tyr	Trp	Pro
	370						375				380				



173

Val Gly Lys Leu Ile Cys Ile Arg Phe Thr Pro Gly Phe Gly Arg Asn  
 385 390 395 400

Ser Phe Leu Lys Ile Gln Leu Ala Asp Leu Lys Met Phe Phe Ile Pro  
 405 410 415

Gln Asn Val Ser Leu Leu Cys His Ser Tyr Arg Leu Ser Ala Phe Phe  
 420 425 430

Asp His His Val Asn Tyr Ala Val Val Asn His Gly Val Gln Ala Asp  
 435 440 445

Glu Leu Val Val Phe Val Lys Gln Asn Val Met Ser Ile Gly Arg Asp  
 450 455 460

Ser Ser Ser Gly Glu His Gly Ser Phe Pro Val Ile Pro Ala Leu Met  
 465 470 475 480

Asn Arg Leu Lys Thr Ala Val Tyr Tyr Gly Gln Phe Asn Phe Thr Gly  
 485 490 495

Leu Pro Gly Leu Ala Phe Gln Leu Leu Ser Cys Arg Glu Thr Trp Cys  
 500 505 510

Cys Thr Val His Ile Leu Glu Lys Trp Gln Glu Cys Ser Leu Glu Leu  
 515 520 525

Gln Ile Thr Gln Gln Arg Ile Pro Tyr Gln Tyr Ile Gly Phe Ser Cys  
 530 535 540

Tyr Ile Glu Ile Trp Tyr Phe Ser Asp Gly Tyr Gly Phe Cys Leu Thr  
 545 550 555 560

Cys Val Ser Val Leu Leu Glu Arg Gln Tyr Arg Ile Lys Asn Phe Leu  
 565 570 575

Met Ser Phe Leu Lys Ile Glu Ile Ile Met Ala Leu Leu Val Val Leu  
 580 585 590

Cys Ser Asp Arg Pro Leu Ile Lys Lys Ser Phe Asn Pro Ala Phe His  
 595 600 605

Phe Thr Ser Pro Pro Phe Ile Phe Asn Ile His Ser Leu Lys Ile Val  
 610 615 620

174

Met Ile Phe Ser Val Ile Gly Tyr Val Lys Lys Phe His Phe Lys Val  
625 630 635 640

Leu Ile Cys Asn Asn Leu His Phe Leu Leu Asn Trp Arg Thr Phe Leu  
645 650 655

Arg Gln Thr Tyr Phe Tyr Glu Leu Ile Phe Ser Leu Val Lys Glu Asn  
660 665 670

Ser Leu Val Ser Tyr Arg Glu Trp Leu Ala Leu Cys Ile Pro His Pro  
675 680 685

Leu Cys Gly Leu Pro Val Ala Val Val Leu Leu Lys Ile Ala Asp Ile  
690 695 700

Leu Ile Asn Met Met Ile Phe Gly Thr Gly Leu Ser Leu Leu Leu Ile  
705 710 715 720

Ser Asn Lys Val Gly Gln Ser Asn Leu Asn Tyr Phe Asn Lys His Asn  
725 730 735

Leu Ala Phe Leu Tyr Met Arg Lys Tyr Phe Gln Lys Ile Thr Arg Phe  
740 745 750

Ile Ser Arg Ile Arg Asp Gly Lys Tyr Gln  
755 760

<210> 137

<211> 138

<212> PRT

<213> Homo sapien

<400> 137

Met Leu Ala Asn Asp Val Arg His Gln Gln Glu Met Trp Gly Phe Arg  
1 5 10 15

Lys Val Glu Gly Gly Val Val Gln Ser Leu Gly Lys Ser Ser Val Glu  
20 25 30

Gly Glu Thr Asp Gly Thr Ile Ser Glu Phe Arg Glu Ile Gln Arg Leu  
35 40 45

Ala Ala Phe Ala Ser Phe Leu Ser His Ala Pro Pro Leu Asn Ala Arg  
50 55 60

Arg Leu Leu Thr Pro Pro Pro Arg Arg Arg Pro Arg Cys Thr Pro Ala

175

65					70					75				80	
Ala	Ala	Met	Ala	Asp	Val	Ser	Glu	Arg	Thr	Leu	Gln	Leu	Ser	Val	Leu
			85						90					95	
Val	Ala	Phe	Ala	Ser	Gly	Val	Leu	Leu	Gly	Trp	Gln	Ala	Asn	Arg	Leu
			100					105						110	
Arg	Arg	Arg	Tyr	Leu	Asp	Trp	Arg	Lys	Arg	Arg	Leu	Gln	Asp	Lys	Leu
		115					120					125			
Ala	Ala	Thr	Gln	Lys	Lys	Leu	Asp	Leu	Ala						
	130					135									
<210> 138															
<211> 179															
<212> PRT															
<213> Homo sapien															
<400> 138															
Met	Pro	Cys	Ala	Arg	Ala	Gly	Gly	Leu	Gly	Leu	Gln	Thr	Pro	Asn	Leu
1				5					10					15	
Asn	Gly	His	Pro	Arg	Ala	Glu	Pro	Pro	Glu	Gly	Thr	Gly	Gly	Phe	His
			20					25					30		
Phe	Gln	Thr	Gly	Ile	Leu	Ala	Ala	Ser	Leu	Leu	Pro	Pro	Ala	Glu	Glu
		35					40					45			
Glu	Thr	Leu	Leu	Tyr	Ile	Leu	Thr	Phe	Cys	Arg	Gln	Val	Lys	Arg	Arg
	50					55					60				
Thr	Gln	Thr	Phe	Gly	Asp	Glu	Arg	Glu	Thr	Lys	Thr	Glu	Pro	Ser	Val
65					70					75					80
Gln	Val	Thr	Ala	Ser	Gln	Ser	Arg	His	Leu	Thr	Asp	Pro	Thr	Tyr	Cys
				85					90					95	
Leu	Phe	Leu	Asn	Met	Asn	Asp	Cys	Arg	Ser	Leu	Pro	Glu	Thr	Val	Ser
			100					105						110	
Glu	Lys	Thr	Ala	Thr	Ser	Tyr	Phe	Leu	Tyr	Val	Phe	Pro	Ile	Lys	Arg
		115					120					125			
Leu	Ser	Trp	Val	Gly	Leu	Arg	Ile	Thr	Glu	Gly	Lys	Arg	Ser	Gln	Phe
	130					135					140				

176

Gln Val Thr Gln Ala Ile Phe Cys Val Lys Arg Glu Gln Asp Lys Ser  
 145 150 155 160

Gln Pro Gln Gln Gln Asn Pro Lys Pro Pro Leu Arg Leu Leu Trp Gln  
 165 170 175

Ser Asn Thr

<210> 139  
 <211> 294  
 <212> PRT  
 <213> Homo sapien

<400> 139

Ile Ser Val Leu Thr Trp Ala Val Phe Thr Pro Pro Leu Pro Ser Arg  
 1 5 10 15

Tyr Phe Ser Cys Ala His Ser Thr Asp Arg Glu Ala Glu Ala Gly Glu  
 20 25 30

Val Arg Thr Arg Leu Arg Ser Tyr Gly Leu Pro Trp Asp Leu Ala Glu  
 35 40 45

Asp Gly Gly Arg Ala Gly Pro Ser Gly Leu Glu Thr Leu Thr Pro Tyr  
 50 55 60

Ser Pro Thr Pro Ser Phe Thr Trp Ser Asp Ala Arg Leu His Arg Gly  
 65 70 75 80

Leu Val Thr Leu Leu Thr Gly Glu Ile Val Asp Ala Phe Ser Leu Glu  
 85 90 95

Phe Arg Thr Leu Tyr Ala Ala Ser Cys Pro Leu Pro Pro Ala Pro Pro  
 100 105 110

Gln Lys Pro Ser Val Ile Gly Gly Leu Gln Arg Gly Arg Ser Leu His  
 115 120 125

Arg Val Ser Arg Arg Arg Ser Val Ala Pro Ala Ser Pro Pro Pro Pro  
 130 135 140

Asp Gly Pro Leu Ala His Arg Leu Ala Ala Cys Arg Val Ser Pro Ala  
 145 150 155 160

Thr Pro Gly Pro Ala Leu Ser Asp Ile Leu Arg Ser Val Gln Arg Ala

[illegible]

178

Leu Val Thr Leu Leu Thr Gly Glu Ile Val Asp Ala Phe Ser Leu Glu  
85 90 95

Phe Arg Thr Leu Tyr Ala Ala Ser Cys Pro Leu Pro Pro Ala Pro Pro  
100 105 110

Gln Lys Pro Ser Val Ile Gly Gly Leu Gln Arg Gly Arg Ser Pro His  
115 120 125

Arg Val Ser Arg Arg Arg Ser Val Ala Pro Ala Ser Pro Pro Pro Pro  
130 135 140

Asp Gly Pro Leu Ala His Arg Leu Ala Ala Cys Arg Val Ser Pro Ala  
145 150 155 160

Thr Pro Gly Pro Ala Leu Ser Asp Ile Leu Arg Ser Val Gln Arg Ala  
165 170 175

Arg Thr Pro Ser Gly Pro Pro Ala Arg Pro Ser Arg Ser Met Trp Asp  
180 185 190

Leu Ser Arg Leu Ser Gln Leu Ser Gly Ser Ser Asp Gly Asp Asn Glu  
195 200 205

Leu Lys Lys Ser Trp Gly Ser Lys Asp Thr Pro Ala Lys Ala Leu Met  
210 215 220

Arg Gln Arg Gly Thr Gly Gly Gly Pro Trp Gly Glu Val Asp Ser Arg  
225 230 235 240

Pro Pro Trp Gly Gly Ala Leu Pro Leu Pro Pro Ala His Arg Leu Arg  
245 250 255

Tyr Leu Ser Pro Ala Arg Arg Arg Phe Gly Gly Asp Ala Thr Phe Lys  
260 265 270

Leu Gln Glu Pro Arg Gly Val Arg Pro Ser Asp Trp Ala Pro Arg Ala  
275 280 285

Gly Leu Gly Gly Gln Pro  
290

<210> 141

<211> 90

<212> PRT

<213> Homo sapien

179

&lt;400&gt; 141

Met Ala Leu Gln Leu Ser Arg Glu Gln Gly Ile Thr Leu Arg Gly Ser  
 1 5 10 15

Ala Glu Ile Val Ala Glu Phe Phe Ser Phe Gly Ile Asn Ser Ile Leu  
 20 25 30

Tyr Gln Arg Gly Ile Tyr Pro Ser Glu Thr Phe Thr Arg Val Gln Lys  
 35 40 45

Tyr Gly Leu Thr Leu Leu Val Thr Thr Asp Leu Glu Leu Ile Lys Tyr  
 50 55 60

Leu Asn Asn Val Val Glu Gln Leu Lys Val His Pro Glu Lys Ser Leu  
 65 70 75 80

Arg Lys Leu Ser Arg Met Lys Ser Val Gln  
 85 90

&lt;210&gt; 142

&lt;211&gt; 373

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 142

Arg Thr Val Thr Val Arg Thr Arg Ile Ala Val Leu Ser Leu Arg Pro  
 1 5 10 15

Gln Cys Gly Gly Ile Leu Phe Arg His Val Val Val Leu Thr Leu Gly  
 20 25 30

Asn Gly Leu Gly Gln Asn Leu Asp Leu Ala Ser Val Gln Ala His Ala  
 35 40 45

Ala Val Gln Gly Arg Arg Val Leu Ile Pro Gly Val Asn Ile Arg Gln  
 50 55 60

Glu Asn Leu Gly Arg Gly Arg Phe His Asp His Val Gln Asp Ala Ala  
 65 70 75 80

Val Gly Gly Val Gly Gln Ala Leu Arg Cys His Gln His Lys Ala Val  
 85 90 95

Gly Leu Thr Gln His Leu Glu Pro Phe Pro Asp Leu Arg Ala Glu Cys  
 100 105 110

180

Arg	Val	Ala	Glu	His	Gln	Pro	Gly	Phe	Val	Gln	Asp	Asp	Glu	Arg	Pro
		115					120					125			
Pro	Val	Trp	Trp	Asn	Ser	Asn	Pro	Glu	Lys	Asp	Ile	Phe	Val	Val	Arg
		130				135					140				
Glu	Asn	Gly	Thr	Thr	Cys	Leu	Met	Ala	Glu	Phe	Ala	Ala	Lys	Phe	Ile
145					150					155					160
Val	Pro	Tyr	Asp	Val	Trp	Ala	Ser	Asn	Tyr	Val	Asp	Leu	Ile	Thr	Glu
				165					170					175	
Gln	Ala	Asp	Ile	Ala	Leu	Thr	Arg	Gly	Ala	Glu	Val	Lys	Gly	Arg	Cys
			180					185					190		
Gly	His	Ser	Gln	Ser	Glu	Leu	Gln	Val	Phe	Trp	Val	Asp	Arg	Ala	Tyr
		195					200					205			
Ala	Leu	Lys	Met	Leu	Phe	Val	Lys	Glu	Ser	His	Asn	Met	Ser	Lys	Gly
	210					215					220				
Pro	Glu	Ala	Thr	Trp	Arg	Leu	Ser	Lys	Val	Gln	Phe	Val	Tyr	Asp	Ser
225					230					235					240
Ser	Glu	Lys	Thr	His	Phe	Lys	Asp	Ala	Val	Ser	Ala	Gly	Lys	His	Thr
				245					250					255	
Ala	Asn	Ser	His	His	Leu	Ser	Ala	Leu	Val	Thr	Pro	Ala	Gly	Lys	Ser
			260					265					270		
Tyr	Glu	Cys	Gln	Ala	Gln	Gln	Thr	Ile	Ser	Leu	Ala	Ser	Ser	Asp	Pro
		275					280					285			
Gln	Lys	Thr	Val	Thr	Met	Ile	Leu	Ser	Ala	Val	His	Ile	Gln	Pro	Phe
	290					295					300				
Asp	Ile	Ile	Ser	Asp	Phe	Val	Phe	Ser	Glu	Glu	His	Lys	Cys	Pro	Val
305					310					315					320
Asp	Glu	Arg	Glu	Gln	Leu	Glu	Glu	Thr	Leu	Pro	Leu	Ile	Leu	Gly	Leu
				325					330					335	
Ile	Leu	Gly	Leu	Val	Ile	Met	Val	Thr	Leu	Ala	Ile	Tyr	His	Val	His
			340					345					350		



181

His Lys Met Thr Ala Asn Gln Val Gln Ile Pro Arg Asp Arg Ser Gln  
 355 360 365

Tyr Lys His Met Gly  
 370

<210> 143  
 <211> 148  
 <212> PRT  
 <213> Homo sapien

<400> 143

Gly Gly Leu Ser Pro Ile His Pro Glu Val Thr Val Tyr Pro Ala Lys  
 1 5 10 15

Thr Gln Pro Leu Gln His His Asn Leu Leu Val Cys Ser Val Ser Gly  
 20 25 30

Phe Tyr Pro Gly Ser Ile Glu Val Arg Trp Phe Arg Asn Gly Gln Glu  
 35 40 45

Glu Lys Ala Gly Val Val Ser Thr Gly Leu Ile Gln Asn Gly Asp Trp  
 50 55 60

Thr Phe Gln Thr Leu Val Met Leu Glu Thr Val Pro Arg Ser Gly Glu  
 65 70 75 80

Val Tyr Thr Cys Gln Val Glu His Pro Ser Val Met Ser Pro Leu Thr  
 85 90 95

Val Glu Trp Arg Ala Arg Ser Glu Ser Ala Gln Ser Lys Met Leu Ser  
 100 105 110

Gly Val Gly Gly Phe Val Leu Gly Leu Leu Phe Leu Gly Ala Gly Leu  
 115 120 125

Phe Ile Tyr Phe Arg Asn Gln Lys Gly His Ser Gly Leu Gln Pro Thr  
 130 135 140

Gly Phe Leu Ser  
 145

<210> 144  
 <211> 72  
 <212> PRT  
 <213> Homo sapien

<400> 144

182

Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr Gln Pro Arg  
1 5 10 15

Phe Leu Trp Gln Asp Lys Tyr Gly Val Ser Phe Leu Gln Arg Asp Gly  
20 25 30

Ala Gly Ala Val Ser Trp Lys Glu Cys Ile Tyr Asn Gln Glu Glu Phe  
35 40 45

Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr Glu Leu  
50 55 60

Gly Arg Pro Val Ala Asp Pro Ser  
65 70

<210> 145

<211> 191

<212> PRT

<213> Homo sapien

<400> 145

Asp Ser Pro Ala Pro Leu Ala Pro Gly Pro Val Leu Phe Ser Ser Met  
1 5 10 15

Val Cys Leu Lys Leu Pro Gly Gly Ser Cys Met Ala Ala Leu Thr Val  
20 25 30

Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr Gln  
35 40 45

Leu His Pro Glu Val Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln  
50 55 60

His His Asn Leu Leu Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser  
65 70 75 80

Ile Glu Val Arg Trp Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val  
85 90 95

Val Ser Thr Gly Leu Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu  
100 105 110

Val Met Leu Glu Thr Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln  
115 120 125

Val Glu His Pro Ser Val Met Ser Pro Leu Thr Val Glu Trp Arg Ala

[illegible]

184

Thr Pro Pro Ser Leu Ser Val Pro Ser Phe Ala Ile Asn Phe Lys Val  
 20 25 30

Gly Ser Ser Gly Asp Ile Ala Leu His Ile Asn Pro Arg Met Gly Asn  
 35 40 45

Gly Thr Val Val Arg Asn Ser Leu Leu Asn Gly Ser Trp Gly Ser Glu  
 50 55 60

Glu Lys Lys Ile Thr His Asn Pro Phe Gly Pro Gly Gln Phe Phe Asp  
 65 70 75 80

Leu Ser Ile Arg Cys Gly Leu Asp Arg Phe Lys Val Tyr Ala Asn Gly  
 85 90 95

Gln His Leu Phe Asp Phe Ala His Arg Leu Ser Ala Phe Gln Arg Val  
 100 105 110

Asp Thr Leu Glu Ile Gln Gly Asp Val Thr Leu Ser Tyr Val Gln Ile  
 115 120 125

<210> 148

<211> 256

<212> PRT

<213> Homo sapien

<400> 148

Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn Tyr Phe Ser  
 1 5 10 15

Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val Pro Pro Ala  
 20 25 30

Ala Thr Phe Gly Ala Asp Asp Leu Val Leu Thr Leu Ser Asn Pro Gln  
 35 40 45

Met Ser Leu Glu Gly Thr Glu Lys Ala Ser Trp Leu Gly Glu Gln Pro  
 50 55 60

Gln Phe Trp Ser Lys Thr Gln Val Leu Asp Trp Ile Ser Tyr Gln Val  
 65 70 75 80

Glu Lys Asn Lys Tyr Asp Ala Ser Ala Ile Asp Phe Ser Arg Cys Asp  
 85 90 95

Met Asp Gly Ala Thr Leu Cys Asn Cys Ala Leu Glu Glu Leu Arg Leu  
 100 105 110

185

Val Phe Gly Pro Leu Gly Asp Gln Leu His Ala Gln Leu Arg Asp Leu  
 115 120 125

Thr Ser Ser Ser Ser Asp Glu Leu Ser Trp Ile Ile Glu Leu Leu Glu  
 130 135 140

Lys Asp Gly Met Ala Phe Gln Glu Ala Leu Asp Pro Gly Pro Phe Asp  
 145 150 155 160

Gln Gly Ser Pro Phe Ala Gln Glu Leu Leu Asp Asp Gly Gln Gln Ala  
 165 170 175

Ser Pro Tyr His Pro Gly Ser Cys Gly Ala Gly Ala Pro Ser Pro Gly  
 180 185 190

Ser Ser Asp Val Ser Thr Ala Gly Thr Gly Ala Ser Arg Ser Ser His  
 195 200 205

Ser Ser Asp Ser Gly Gly Ser Asp Val Asp Leu Asp Pro Thr Asp Gly  
 210 215 220

Lys Leu Phe Pro Ser Gly Glu Ser Arg Glu Val Pro Lys Arg Ala Ser  
 225 230 235 240

His Leu Ala Met His Arg Gly Pro Gly Ser Ser Cys Ser Leu Phe Leu  
 245 250 255

<210> 149

<211> 250

<212> PRT

<213> Homo sapien

<400> 149

Gly Ser Ala Ala Ala Arg Tyr Leu Ser Ala Thr Trp Arg Asn Trp Ile  
 1 5 10 15

Ser Leu Pro Pro Ala Gly Leu Pro Ala Thr Ala Gly Leu Arg His Ser  
 20 25 30

Gly Ser Leu Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn  
 35 40 45

Tyr Phe Ser Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val  
 50 55 60

186

Pro Pro Ala Ala Thr Phe Gly Ala Asp Asp Leu Val Leu Thr Leu Ser  
65 70 75 80

Asn Pro Gln Met Ser Leu Glu Gly Thr Glu Lys Ala Ser Trp Leu Gly  
85 90 95

Glu Gln Pro Gln Phe Trp Ser Lys Thr Gln Val Leu Asp Trp Ile Ser  
100 105 110

Tyr Gln Val Glu Lys Asn Lys Tyr Asp Ala Ser Ala Ile Asp Phe Ser  
115 120 125

Arg Cys Asp Met Asp Gly Ala Thr Leu Cys Asn Cys Ala Leu Glu Glu  
130 135 140

Leu Arg Leu Val Phe Gly Pro Leu Gly Asp Gln Leu His Ala Gln Leu  
145 150 155 160

Arg Asp Leu Thr Ser Ser Ser Ser Asp Glu Leu Ser Trp Ile Ile Glu  
165 170 175

Leu Leu Glu Lys Asp Gly Met Ala Phe Gln Glu Ala Leu Asp Pro Gly  
180 185 190

Pro Phe Asp Gln Gly Ser Pro Phe Ala Gln Glu Leu Leu Asp Asp Gly  
195 200 205

Gln Gln Ala Ser Pro Tyr His Pro Gly Ser Cys Gly Ala Gly Ala Pro  
210 215 220

Ser Pro Gly Ser Ser Asp Val Ser Thr Ala Gly Thr Gly Thr Gly Trp  
225 230 235 240

Glu Val Cys Pro Glu Ser Gln Gln Arg Gly  
245 250

&lt;210&gt; 150

&lt;211&gt; 402

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 150

Met Ala Ala Thr Cys Glu Ile Ser Asn Ile Phe Ser Asn Tyr Phe Ser  
1 5 10 15

Ala Met Tyr Ser Ser Glu Asp Ser Thr Leu Ala Ser Val Pro Pro Ala  
20 25 30

187

Ala Thr Phe Gly Ala Asp Asp Leu Val Leu Thr Leu Ser Asn Pro Gln  
 35 40 45

Met Ser Leu Glu Gly Thr Glu Lys Ala Ser Trp Leu Gly Glu Gln Pro  
 50 55 60

Gln Phe Trp Ser Lys Thr Gln Val Leu Asp Trp Ile Ser Tyr Gln Val  
 65 70 75 80

Glu Lys Asn Lys Tyr Asp Ala Ser Ala Ile Asp Phe Ser Arg Cys Asp  
 85 90 95

Met Asp Gly Ala Thr Leu Cys Asn Cys Ala Leu Glu Glu Leu Arg Leu  
 100 105 110

Val Phe Gly Pro Leu Gly Asp Gln Leu His Ala Gln Leu Arg Asp Leu  
 115 120 125

Thr Ser Ser Ser Ser Asp Glu Leu Ser Trp Ile Ile Glu Leu Leu Glu  
 130 135 140

Lys Asp Gly Met Ala Phe Gln Glu Ala Leu Asp Pro Gly Pro Phe Asp  
 145 150 155 160

Gln Gly Ser Pro Phe Ala Gln Glu Leu Leu Asp Asp Gly Gln Gln Ala  
 165 170 175

Ser Pro Tyr His Pro Gly Ser Cys Gly Ala Gly Ala Pro Ser Pro Gly  
 180 185 190

Ser Ser Asp Val Ser Thr Ala Gly Thr Gly Thr Gly Trp Glu Val Cys  
 195 200 205

Pro Glu Ser Arg Ser Val Val Glu Gln Arg Val Gly Arg Gln Gly Thr  
 210 215 220

Tyr Ser Asp Pro Ala Pro Arg Thr Gly Ala Ser Arg Ser Ser His Ser  
 225 230 235 240

Ser Asp Ser Gly Gly Ser Asp Val Asp Leu Asp Pro Thr Asp Gly Lys  
 245 250 255

Leu Phe Pro Ser Asp Gly Phe Arg Asp Cys Lys Lys Gly Asp Pro Lys  
 260 265 270

188

His Gly Lys Arg Lys Arg Gly Arg Pro Arg Lys Leu Ser Lys Glu Tyr  
 275 280 285

Trp Asp Cys Leu Glu Gly Lys Lys Ser Lys His Ala Pro Arg Gly Thr  
 290 295 300

His Leu Trp Glu Phe Ile Arg Asp Ile Leu Ile His Pro Glu Leu Asn  
 305 310 315 320

Glu Gly Leu Met Lys Trp Glu Asn Arg His Glu Gly Val Phe Lys Phe  
 325 330 335

Leu Arg Ser Glu Ala Val Ala Gln Leu Trp Gly Gln Lys Lys Lys Asn  
 340 345 350

Ser Asn Met Thr Tyr Glu Lys Leu Ser Arg Ala Met Arg Tyr Tyr Tyr  
 355 360 365

Lys Arg Glu Ile Leu Glu Arg Val Asp Gly Arg Arg Leu Val Tyr Lys  
 370 375 380

Phe Gly Lys Asn Ser Ser Gly Trp Lys Glu Glu Glu Val Leu Gln Ser  
 385 390 395 400

Arg Asn

<210> 151  
 <211> 219  
 <212> PRT  
 <213> Homo sapien

<400> 151

Met Ser Leu Pro Val Lys Pro Glu Leu Leu Gly Asp Leu Glu Ile Pro  
 1 5 10 15

Ala Val Pro Ile Leu His Ser Met Val Gln Lys Phe Pro Gly Val Ser  
 20 25 30

Phe Gly Ile Ser Thr Asp Ser Glu Val Leu Thr His Tyr Asn Ile Thr  
 35 40 45

Gly Asn Thr Ile Cys Leu Phe Arg Leu Val Asp Asn Glu Gln Leu Asn  
 50 55 60

Leu Glu Asp Glu Asp Ile Glu Ser Ile Asp Ala Thr Lys Leu Ser Arg



189																
65	70										75				80	
Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val	Thr	Glu	Tyr	Asn	Pro	Val	
				85					90					95		
Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile	Gln	Ile	His	Leu	Leu	Leu	
			100					105					110			
Ile	Met	Asn	Lys	Ala	Ser	Pro	Glu	Tyr	Glu	Glu	Asn	Met	His	Arg	Tyr	
		115					120					125				
Gln	Lys	Ala	Ala	Lys	Leu	Phe	Gln	Gly	Lys	Ile	Leu	Phe	Ile	Leu	Val	
	130					135					140					
Asp	Ser	Gly	Met	Lys	Glu	Asn	Gly	Lys	Val	Ile	Ser	Phe	Phe	Lys	Leu	
145					150					155					160	
Lys	Glu	Ser	Gln	Leu	Pro	Ala	Leu	Ala	Ile	Tyr	Gln	Thr	Leu	Asp	Asp	
				165					170					175		
Glu	Trp	Asp	Thr	Leu	Pro	Thr	Ala	Glu	Val	Ser	Val	Glu	His	Val	Gln	
			180					185					190			
Asn	Phe	Cys	Asp	Gly	Phe	Leu	Ser	Gly	Lys	Leu	Leu	Lys	Glu	Asn	Arg	
		195					200					205				
Glu	Ser	Glu	Gly	Lys	Thr	Pro	Lys	Val	Glu	Leu						
	210					215										
<210>	152															
<211>	172															
<212>	PRT															
<213>	Homo sapien															
<400>	152															
Met	Lys	Glu	Thr	Cys	Gln	Leu	Glu	Ile	Gln	Val	Asp	Asn	Glu	Gln	Leu	
1				5					10					15		
Asn	Leu	Glu	Asp	Glu	Asp	Ile	Glu	Ser	Ile	Asp	Ala	Thr	Lys	Leu	Ser	
			20					25					30			
Arg	Phe	Ile	Glu	Ile	Asn	Ser	Leu	His	Met	Val	Thr	Glu	Tyr	Asn	Pro	
	35						40					45				
Val	Thr	Val	Ile	Gly	Leu	Phe	Asn	Ser	Val	Ile	Gln	Ile	His	Leu	Leu	
	50					55					60					

190

Leu Ile Met Asn Lys Ala Ser Pro Glu Tyr Glu Glu Asn Met His Arg  
65 70 75 80

Tyr Gln Lys Ala Ala Lys Leu Phe Gln Gly Lys Ile Leu Phe Ile Leu  
85 90 95

Val Asp Ser Gly Met Lys Glu Asn Gly Lys Val Ile Ser Phe Phe Lys  
100 105 110

Leu Lys Glu Ser Gln Leu Pro Ala Leu Ala Ile Tyr Gln Thr Leu Asp  
115 120 125

Asp Glu Trp Asp Thr Leu Pro Thr Ala Glu Val Ser Val Glu His Val  
130 135 140

Gln Asn Phe Cys Asp Gly Phe Leu Ser Gly Lys Leu Leu Lys Glu Asn  
145 150 155 160

Arg Glu Ser Glu Gly Lys Thr Pro Lys Val Glu Leu  
165 170

<210> 153

<211> 329

<212> PRT

<213> Homo sapien

<400> 153

Ser Gly Asp Leu Gln Pro His Ser Arg Cys Pro Gly Gly Arg Arg Asp  
1 5 10 15

Pro Gln Ile Lys Leu Ser Leu Thr Glu Lys Asp Glu Gly Gln Glu Glu  
20 25 30

Cys Ser Phe Leu Val Ala Leu Met Gln Lys Asp Arg Arg Lys Leu Lys  
35 40 45

Arg Phe Gly Ala Asn Val Leu Thr Ile Gly Tyr Ala Ile Tyr Glu Cys  
50 55 60

Pro Asp Lys Asp Glu His Leu Asn Lys Asp Phe Phe Arg Tyr His Ala  
65 70 75 80

Ser Arg Ala Arg Ser Lys Thr Phe Ile Asn Leu Arg Glu Val Ser Asp  
85 90 95

Arg Phe Lys Leu Pro Pro Gly Glu Tyr Ile Leu Ile Pro Ser Thr Phe

191

100	105	110
Glu Pro His Gln Glu Ala Asp Phe Cys Leu Arg Ile Phe Ser Glu Lys 115 120 125		
Lys Ala Ile Thr Arg Asp Met Asp Gly Asn Val Asp Ile Asp Leu Pro 130 135 140		
Glu Pro Pro Lys Pro Thr Pro Pro Asp Gln Glu Thr Glu Glu Glu Gln 145 150 155 160		
Arg Phe Arg Ala Leu Phe Glu Gln Val Ala Gly Glu Asp Met Glu Val 165 170 175		
Thr Ala Glu Glu Leu Glu Tyr Val Leu Asn Ala Val Leu Gln Lys Lys 180 185 190		
Lys Asp Ile Lys Phe Lys Lys Leu Ser Leu Ile Ser Cys Lys Asn Ile 195 200 205		
Ile Ser Leu Met Asp Thr Ser Gly Asn Gly Lys Leu Glu Phe Asp Glu 210 215 220		
Phe Lys Val Phe Trp Asp Lys Leu Lys Gln Trp Ile Asn Leu Phe Leu 225 230 235 240		
Arg Phe Asp Ala Asp Lys Ser Gly Thr Met Ser Thr Tyr Glu Leu Arg 245 250 255		
Thr Ala Leu Lys Ala Ala Gly Phe Gln Leu Ser Ser His Leu Leu Gln 260 265 270		
Leu Ile Val Leu Arg Tyr Ala Asp Glu Glu Leu Gln Leu Asp Phe Asp 275 280 285		
Asp Phe Leu Asn Cys Leu Val Arg Leu Glu Asn Ala Ser Arg Val Phe 290 295 300		
Gln Ala Leu Ser Thr Lys Asn Lys Glu Phe Ile His Leu Asn Ile Asn 305 310 315 320		
Glu Phe Ile His Leu Thr Met Asn Ile 325		
<210> 154		
<211> 595		

192

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 154

Met Val Cys Leu Phe Leu Lys Cys Asn Leu Gln Asn Ser Pro Glu Arg  
 1 5 10 15

Asn Asn Ser Phe Trp Glu Val Val Ala Ala Ala Gly Thr Val Ala Pro  
 20 25 30

Trp Glu Ile Val Lys Asn Pro Glu Phe Ile Leu Gly Gly Ala Thr Arg  
 35 40 45

Thr Asp Ile Cys Gln Gly Glu Leu Gly Asp Cys Trp Leu Leu Ala Ala  
 50 55 60

Ile Ala Ser Leu Thr Leu Asn Gln Lys Ala Leu Ala Arg Val Ile Pro  
 65 70 75 80

Gln Asp Gln Ser Phe Gly Pro Gly Tyr Ala Gly Ile Phe His Phe Gln  
 85 90 95

Phe Trp Gln His Ser Glu Trp Leu Asp Val Val Ile Asp Asp Arg Leu  
 100 105 110

Pro Thr Phe Arg Asp Arg Leu Val Phe Leu His Ser Ala Asp His Asn  
 115 120 125

Glu Phe Trp Ser Ala Leu Leu Glu Lys Ala Tyr Ala Lys Leu Asn Gly  
 130 135 140

Ser Tyr Glu Ala Leu Lys Gly Gly Ser Ala Ile Glu Ala Met Glu Asp  
 145 150 155 160

Phe Thr Gly Gly Val Ala Glu Thr Phe Gln Thr Lys Glu Ala Pro Glu  
 165 170 175

Asn Phe Tyr Glu Ile Leu Glu Lys Ala Leu Lys Arg Gly Ser Leu Leu  
 180 185 190

Gly Cys Phe Ile Asp Thr Arg Ser Ala Ala Glu Ser Glu Ala Arg Thr  
 195 200 205

Pro Phe Gly Leu Ile Lys Gly His Ala Tyr Ser Val Thr Gly Ile Asp  
 210 215 220

193

Gln Val Ser Phe Arg Gly Gln Arg Ile Glu Leu Ile Arg Ile Arg Asn  
 225 230 235 240

Pro Trp Gly Gln Val Glu Trp Asn Gly Ser Trp Ser Asp Arg Met Ala  
 245 250 255

Phe Lys Asp Phe Lys Ala His Phe Asp Lys Val Glu Ile Cys Asn Leu  
 260 265 270

Thr Pro Asp Ala Leu Glu Glu Asp Ala Asp Pro Gln Ile Lys Leu Ser  
 275 280 285

Leu Thr Glu Lys Asp Glu Gly Gln Glu Glu Cys Ser Phe Leu Val Ala  
 290 295 300

Leu Met Gln Lys Asp Arg Arg Lys Leu Lys Arg Phe Gly Ala Asn Val  
 305 310 315 320

Leu Thr Ile Gly Tyr Ala Ile Tyr Glu Cys Pro Asp Lys Asp Glu His  
 325 330 335

Leu Asn Lys Asp Phe Phe Arg Tyr His Ala Ser Arg Ala Arg Ser Lys  
 340 345 350

Thr Phe Ile Asn Leu Arg Glu Val Ser Asp Arg Phe Lys Leu Pro Pro  
 355 360 365

Gly Glu Tyr Ile Leu Ile Pro Ser Thr Phe Glu Pro His Gln Glu Ala  
 370 375 380

Asp Phe Cys Leu Arg Ile Phe Ser Glu Lys Lys Ala Ile Thr Arg Asp  
 385 390 395 400

Met Asp Gly Asn Val Asp Ile Asp Leu Pro Glu Pro Pro Lys Pro Thr  
 405 410 415

Pro Pro Asp Gln Glu Thr Glu Glu Glu Gln Arg Phe Arg Ala Leu Phe  
 420 425 430

Glu Gln Val Ala Gly Glu Asp Met Glu Val Thr Ala Glu Glu Leu Glu  
 435 440 445

Tyr Val Leu Asn Ala Val Leu Gln Lys Lys Lys Asp Ile Lys Phe Lys  
 450 455 460

Lys Leu Ser Leu Ile Ser Cys Lys Asn Ile Ile Ser Leu Met Asp Thr

465 470 475 480

Ser Gly Asn Gly Lys Leu Glu Phe Asp Glu Phe Lys Val Phe Trp Asp  
485 490 495

Lys Leu Lys Gln Trp Ile Asn Leu Phe Leu Arg Phe Asp Ala Asp Lys  
500 505 510

Ser Gly Thr Met Ser Thr Tyr Glu Leu Arg Thr Ala Leu Lys Ala Ala  
515 520 525

Gly Phe Gln Leu Ser Ser His Leu Leu Gln Leu Ile Val Leu Arg Tyr  
530 535 540

Ala Asp Glu Glu Leu Gln Leu Asp Phe Asp Asp Phe Leu Asn Cys Leu  
545 550 555 560

Val Arg Leu Glu Asn Ala Ser Arg Val Phe Gln Ala Leu Ser Thr Lys  
565 570 575

Asn Lys Glu Phe Ile His Leu Asn Ile Asn Glu Phe Ile His Leu Thr  
580 585 590

Met Asn Ile  
595

<210> 155  
<211> 85  
<212> PRT  
<213> Homo sapien

<400> 155

Ala Leu Ser Val Val Ala Ala Glu Val Arg Val Val Gly Arg Asn Gly  
1 5 10 15

Glu Ser Ser Glu Leu Asp Leu Gln Gly Ile Arg Ile Asp Ser Asp Ile  
20 25 30

Ser Gly Thr Leu Lys Phe Ala Cys Glu Ser Ile Val Glu Glu Tyr Glu  
35 40 45

Asp Glu Leu Ile Glu Phe Phe Ser Arg Glu Ala Asp Asn Val Lys Asp  
50 55 60

Lys Leu Cys Ser Lys Arg Thr Asp Leu Cys Asp His Ala Leu His Ile  
65 70 75 80

195

Ser His Asp Glu Leu  
85

<210> 156

<211> 255

<212> PRT

<213> Homo sapien

<400> 156

Met Ala Asp Tyr Ser Thr Val Pro Pro Pro Ser Ser Gly Ser Ala Gly  
1 5 10 15

Gly Gly Gly Gly Gly Gly Gly Gly Gly Gly Val Asn Asp Ala Phe Lys  
20 25 30

Asp Ala Leu Gln Arg Ala Arg Gln Ile Ala Ala Lys Ile Gly Gly Asp  
35 40 45

Ala Gly Thr Ser Leu Asn Ser Asn Asp Tyr Gly Tyr Gly Gly Gln Lys  
50 55 60

Arg Pro Leu Glu Asp Gly Asp Gln Pro Asp Ala Lys Lys Val Ala Pro  
65 70 75 80

Gln Asn Asp Ser Phe Gly Thr Gln Leu Pro Pro Met His Gln Gln Gln  
85 90 95

Ser Arg Ser Val Met Thr Glu Glu Tyr Lys Val Pro Asp Gly Met Val  
100 105 110

Gly Phe Ile Ile Gly Arg Gly Gly Glu Gln Ile Ser Arg Ile Gln Gln  
115 120 125

Glu Ser Gly Cys Lys Ile Gln Ile Ala Pro Asp Ser Gly Gly Leu Pro  
130 135 140

Glu Arg Ser Cys Met Leu Thr Gly Thr Pro Glu Ser Val Gln Ser Ala  
145 150 155 160

Lys Arg Leu Leu Asp Gln Ile Val Glu Lys Gly Arg Pro Ala Pro Gly  
165 170 175

Phe His His Gly Asp Gly Pro Gly Asn Ala Val Gln Glu Ile Met Ile  
180 185 190

Pro Ala Ser Lys Ala Gly Leu Val Ile Gly Lys Gly Gly Glu Thr Ile

196

195

200

205

Lys Gln Leu Gln Glu Arg Ala Gly Val Lys Met Val Met Ile Gln Asp  
 210 215 220

Gly Val Ala Ala Ala Ala Ala Val Phe Phe Thr Ser Ile Ile Arg Leu  
 225 230 235 240

Ala Phe Asn Lys Glu Lys Val Leu Thr Pro Val Leu Asn Cys Thr  
 245 250 255

<210> 157

<211> 174

<212> PRT

<213> Homo sapien

<400> 157

Met Ala Glu His Phe Leu Thr Leu Leu Val Val Pro Ala Ile Lys Lys  
 1 5 10 15

Asp Tyr Gly Ser Gln Glu Asp Phe Thr Gln Val Trp Asn Thr Thr Met  
 20 25 30

Lys Gly Leu Lys Cys Cys Gly Phe Thr Asn Tyr Thr Asp Phe Glu Asp  
 35 40 45

Ser Pro Tyr Phe Lys Glu Asn Ser Ala Phe Pro Pro Phe Cys Cys Asn  
 50 55 60

Asp Asn Val Thr Asn Thr Ala Asn Glu Thr Cys Thr Lys Gln Lys Ala  
 65 70 75 80

His Asp Gln Lys Val Glu Gly Cys Phe Asn Gln Leu Leu Tyr Asp Ile  
 85 90 95

Arg Thr Asn Ala Val Thr Val Gly Gly Val Ala Ala Gly Ile Gly Gly  
 100 105 110

Leu Glu Leu Ala Ala Met Ile Val Ser Met Tyr Leu Tyr Leu Pro Gly  
 115 120 125

Arg Pro Ala Trp Ser Arg Pro Arg Tyr Ser Asp Ser Val Gly Arg Val  
 130 135 140

Ser Phe Pro Ser Leu Val Cys Phe Leu Met Arg Leu Glu Ala Met Ala  
 145 150 155 160



197

Lys Thr Phe Arg Asn Ser Leu Arg Met Glu Lys Asp Ser Thr  
 165 170

<210> 158  
 <211> 354  
 <212> PRT  
 <213> Homo sapien

<400> 158

Met Gly Gln Asp Trp Gly Pro His His Met Ser Arg Glu Asp Leu Ile  
 1 5 10 15

Cys Gly Gly Gly Lys Gly Ser Leu Val Trp Pro Thr Trp Ser Thr Thr  
 20 25 30

Ser Leu Trp Pro Gln Val Leu Leu Val Gln Phe Lys Gly Thr Gly Lys  
 35 40 45

Tyr Tyr Ala Ile Lys Ala Leu Lys Lys Gln Glu Val Leu Ser Arg Asp  
 50 55 60

Glu Ile Glu Ser Leu Tyr Cys Glu Lys Arg Ile Leu Glu Ala Val Gly  
 65 70 75 80

Cys Thr Gly His Pro Phe Leu Leu Ser Leu Leu Ala Cys Phe Gln Thr  
 85 90 95

Ser Ser His Ala Cys Phe Val Thr Glu Phe Val Pro Gly Gly Asp Leu  
 100 105 110

Met Met Gln Ile His Glu Asp Val Phe Pro Glu Pro Gln Ala Arg Phe  
 115 120 125

Tyr Val Ala Cys Val Val Leu Gly Leu Gln Phe Leu His Glu Lys Lys  
 130 135 140

Ile Ile Tyr Arg Asp Leu Lys Leu Asp Asn Leu Leu Leu Asp Ala Gln  
 145 150 155 160

Gly Phe Leu Lys Ile Ala Asp Phe Gly Leu Cys Lys Glu Gly Ile Gly  
 165 170 175

Phe Gly Asp Arg Thr Ser Thr Phe Cys Gly Thr Pro Glu Phe Leu Ala  
 180 185 190

Pro Glu Val Leu Thr Gln Glu Ala Tyr Thr Arg Ala Val Asp Trp Trp

198

195	200	205
Gly Leu Gly Val Leu Leu Tyr 210 215	Glu Met Leu Val 220	Gly Glu Cys Pro Phe 225
Pro Gly Asp Thr Glu Glu Glu Val Phe Asp Cys Ile Val Asn Met Asp 225 230 235 240		
Ala Pro Tyr Pro Gly Phe Leu Ser Val Gln Gly Leu Glu Phe Ile Gln 245 250 255		
Lys Leu Leu Gln Lys Cys Pro Glu Lys Arg Leu Gly Ala Gly Glu Gln 260 265 270		
Asp Ala Glu Glu Ile Lys Val Gln Pro Phe Phe Arg Thr Thr Asn Trp 275 280 285		
Gln Ala Leu Leu Ala Arg Thr Ile Gln Pro Pro Phe Val Pro Thr Leu 290 295 300		
Cys Gly Pro Ala Asp Leu Arg Tyr Phe Glu Gly Glu Phe Thr Gly Leu 305 310 315 320		
Pro Pro Ala Leu Thr Pro Pro Ala Pro His Ser Leu Leu Thr Ala Arg 325 330 335		
Gln Gln Ala Ala Phe Arg Asp Phe Asp Phe Val Ser Glu Arg Phe Leu 340 345 350		
Glu Pro		

<210> 159  
 <211> 489  
 <212> PRT  
 <213> Homo sapien

<400> 159

Met Glu Glu Gly Ala Pro Arg Gln Pro Gly Pro Ser Gln Trp Pro Pro 1 5 10 15		
Glu Asp Glu Lys Glu Val Ile Arg Arg Ala Ile Gln Lys Glu Leu Lys 20 25 30		
Ile Lys Glu Gly Val Glu Asn Leu Arg Arg Val Ala Thr Asp Arg Arg 35 40 45		

199

His Leu Gly His Val Gln Gln Leu Leu Arg Ser Ser Asn Arg Arg Leu  
 50 55 60

Glu Gln Leu His Gly Glu Leu Arg Glu Leu His Ala Arg Ile Leu Leu  
 65 70 75 80

Pro Gly Pro Gly Pro Gly Pro Ala Glu Pro Val Ala Ser Gly Pro Arg  
 85 90 95

Pro Trp Ala Glu Gln Leu Arg Ala Arg His Leu Glu Ala Leu Arg Arg  
 100 105 110

Gln Leu His Val Glu Leu Lys Val Lys Gln Gly Ala Glu Asn Met Thr  
 115 120 125

His Thr Cys Ala Ser Gly Thr Pro Lys Glu Arg Lys Leu Leu Ala Ala  
 130 135 140

Ala Gln Gln Met Leu Arg Asp Ser Gln Leu Lys Val Ala Leu Leu Arg  
 145 150 155 160

Met Lys Ile Ser Ser Leu Glu Ala Ser Gly Ser Pro Glu Pro Gly Pro  
 165 170 175

Glu Leu Leu Ala Glu Glu Leu Gln His Arg Leu His Val Glu Ala Ala  
 180 185 190

Val Ala Glu Gly Ala Lys Asn Val Val Lys Leu Leu Ser Ser Arg Arg  
 195 200 205

Thr Gln Asp Arg Lys Ala Leu Ala Glu Ala Gln Ala Gln Leu Gln Glu  
 210 215 220

Ser Ser Gln Lys Leu Asp Leu Leu Arg Leu Ala Leu Glu Gln Leu Leu  
 225 230 235 240

Glu Gln Leu Pro Pro Ala His Pro Leu Arg Ser Arg Val Thr Arg Glu  
 245 250 255

Leu Arg Ala Ala Val Pro Gly Tyr Pro Gln Pro Ser Gly Thr Pro Val  
 260 265 270

Lys Pro Thr Ala Leu Thr Gly Thr Leu Gln Val Arg Leu Leu Gly Cys  
 275 280 285

200

Glu Gln Leu Leu Thr Ala Val Pro Gly Arg Ser Pro Ala Ala Ala Leu  
 290 295 300

Ala Ser Ser Pro Ser Glu Gly Trp Leu Arg Thr Lys Ala Lys His Gln  
 305 310 315 320

Arg Gly Arg Gly Glu Leu Ala Ser Glu Val Leu Ala Val Leu Lys Val  
 325 330 335

Asp Asn Arg Val Val Gly Gln Thr Gly Trp Gly Gln Val Ala Glu Gln  
 340 345 350

Ser Trp Asp Gln Thr Phe Val Ile Pro Leu Glu Arg Ala Arg Glu Leu  
 355 360 365

Glu Ile Gly Val His Trp Arg Asp Trp Arg Gln Leu Cys Gly Val Ala  
 370 375 380

Phe Leu Arg Leu Glu Asp Phe Leu Asp Asn Ala Cys His Gln Leu Ser  
 385 390 395 400

Leu Ser Leu Val Pro Gln Gly Leu Leu Phe Ala Gln Val Thr Phe Cys  
 405 410 415

Asp Pro Val Ile Glu Arg Arg Pro Arg Leu Gln Arg Gln Glu Arg Ile  
 420 425 430

Phe Ser Lys Arg Arg Gly Arg Leu Pro Gly Leu Arg Leu Cys Val Arg  
 435 440 445

Ala Ile Pro Gly Thr Leu Arg Ala Ser Pro Gly Thr Ser Val Pro Phe  
 450 455 460

Pro His Arg Leu Leu Glu Pro Leu Leu Val His Pro Cys Ala Leu Pro  
 465 470 475 480

Gly Gly Pro Gly Leu Ala Gly Tyr Phe  
 485

&lt;210&gt; 160

&lt;211&gt; 287

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 160

Met Asp Met Ala Trp Gln Met Met Gln Leu Leu Leu Leu Ala Leu Val  
 1 5 10 15

201

Thr Ala Ala Gly Ser Ala Gln Pro Arg Ser Ala Arg Ala Arg Thr Asp  
 20 25 30

Leu Leu Asn Val Cys Met Asn Ala Lys His His Lys Thr Gln Pro Ser  
 35 40 45

Pro Glu Asp Glu Leu Tyr Gly Gln Val Gly Ala Pro Gln Gly Pro Ser  
 50 55 60

Pro Gly Ser Val Pro Leu Asp Asp Leu Pro Gly Ala Glu Glu Pro Glu  
 65 70 75 80

Tyr Gly Gly Asp Gly Cys Gly Gly Glu Arg Leu Ser Pro Val Ser Ser  
 85 90 95

Pro Pro Ser Ala Val Pro Gly Arg Arg Met Pro Ala Ala Arg Pro Ala  
 100 105 110

Pro Ala Arg Ser Cys Thr Arg Thr Pro Pro Ala Cys Thr Thr Leu Thr  
 115 120 125

Gly Ile Thr Val Val Arg Trp Asn Pro Pro Ala Ser Ala Thr Leu Ser  
 130 135 140

Arg Thr Ala Val Ser Glu Cys Ser Pro Asn Leu Gly Pro Trp Ile Arg  
 145 150 155 160

Gln Val Asn Gln Ser Trp Arg Lys Glu Arg Ile Leu Asn Val Pro Leu  
 165 170 175

Cys Lys Glu Asp Cys Glu Arg Trp Trp Glu Asp Cys Arg Thr Ser Tyr  
 180 185 190

Thr Cys Lys Ser Asn Trp His Lys Gly Trp Asn Trp Thr Ser Gly Ile  
 195 200 205

Asn Glu Cys Pro Ala Gly Ala Leu Cys Ser Thr Phe Glu Ser Tyr Phe  
 210 215 220

Pro Thr Pro Ala Ala Leu Cys Glu Gly Leu Trp Ser His Ser Phe Lys  
 225 230 235 240

Val Ser Asn Tyr Ser Arg Gly Ser Gly Arg Cys Ile Gln Met Trp Phe  
 245 250 255

Asp Ser Ala Gln Gly Asn Pro Asn Glu Glu Val Ala Lys Phe Tyr Ala  
260 265 270

Ala Ala Met Asn Ala Gly Ala Pro Ser Arg Gly Ile Ile Asp Ser  
275 280 285

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<210> 161
<211> 143
<212> PRT
<213> Homo sapien
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<400> 161

Met Thr His Ser Leu Val Cys Pro Glu Thr Val Ser Arg Val Ser Ser  
1 5 10 15

Val Leu Asn Arg Asn Thr Arg Gln Phe Gly Lys Lys His Leu Phe Asp  
20 25 30

Gln Asp Glu Glu Thr Cys Trp Asn Ser Asp Gln Gly Pro Ser Gln Trp  
35 40 45

Val Thr Leu Glu Phe Pro Gln Leu Ile Arg Val Ser Gln Leu Gln Ile  
50 55 60

Gln Phe Gln Gly Gly Phe Ser Ser Arg Arg Gly Cys Leu Glu Gly Ser  
65 70 75 80

Gln Gly Thr Gln Ala Leu His Lys Ile Val Asp Phe Tyr Pro Glu Asp  
85 90 95

Asn Asn Ser Leu Gln Asp Ile Leu Pro Leu Leu Leu Gly Trp Val Val  
100 105 110

Cys Ala Ser Gly Ser Phe Gly Leu Thr Gln Thr Arg Met Gly Thr Leu  
115 120 125

Met Cys Asp Leu Glu His Val Thr Ser Arg Thr Pro Leu Phe Leu  
130 135 140

```
<210> 162
<211> 116
<212> PRT
<213> Homo sapien
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<400> 162

Gly Leu Ser Pro Pro Gly Ser Pro Pro Gly Ser Thr Ala Lys Ser Leu  
1 5 10 15

203

Ile Leu His Arg Arg Phe Ile Gly Ser Ser Trp Glu Gly Ser Pro Pro  
                   20                  25                  30

Thr Thr Cys Pro Glu Ala Ala Phe Glu Val Ser Ser Gly Phe Pro Gln  
           35                  40                  45

Leu Trp Leu Thr Ile Leu Phe Pro Glu Cys Leu Ser Pro Gly Arg Arg  
       50                  55                  60

Leu His Ser Gly Ser Ala Gly Thr Arg Leu Leu Trp Lys Ser Leu Arg  
       65                  70                  75                  80

Met Trp Phe Ser Ile Thr Cys Cys Thr Glu Met Gly Gln Gly Lys Ala  
                   85                  90                  95

Trp Ala Val Ser Leu Asn Arg Glu Trp Gly Gly Gly Thr Gly Gln Pro  
                   100                  105                  110

Ala Leu Ser Pro  
       115

<210> 163

<211> 67

<212> PRT

<213> Homo sapien

<400> 163

Met Leu Glu Leu Arg Pro Gly Ser Gln Gly Thr Gln Ala Leu His Lys  
       1                  5                  10                  15

Ile Val Asp Phe Tyr Pro Glu Asp Asn Asn Ser Leu Gln Thr Phe Pro  
                   20                  25                  30

Ile Pro Ala Ala Glu Val Asp Arg Leu Lys Val Thr Phe Glu Asp Ala  
       35                  40                  45

Thr Asp Phe Phe Gly Arg Val Val Ile Tyr His Leu Arg Val Leu Gly  
       50                  55                  60

Glu Lys Val  
       65

<210> 164

<211> 104

<212> PRT

<213> Homo sapien

204

&lt;400&gt; 164

Gly Trp Thr Gly Cys Val Arg Ile Ser Gly Ala Gly Arg Ser Arg Ile  
 1 5 10 15

Leu Gln Ala Leu Ala Arg Lys Pro Glu Asp Pro Pro Leu Pro Arg Thr  
 20 25 30

Arg Lys Ser Ser Ser Cys Leu Leu Ser Ser Leu Trp Gln Glu Leu Arg  
 35 40 45

Ala Leu Glu Leu Leu Gly Pro Ser Gln Gly Leu Pro Tyr Leu Lys Pro  
 50 55 60

Gln Leu Gly Pro Leu Ser Pro Pro Gly Met Arg Pro Arg Ala Pro Leu  
 65 70 75 80

Thr Arg Arg Pro Arg Ser Leu Thr Leu Ile Phe His Arg Val Gln Glu  
 85 90 95

Phe Ile Arg Thr Pro Lys Ser Glu  
 100

&lt;210&gt; 165

&lt;211&gt; 82

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 165

Gln Val Pro His Ala Ser Gly Cys Ile Gly Glu Asp Pro Gln Gly Ile  
 1 5 10 15

Pro Leu Pro Leu Asp Glu Ala His Pro Thr Gly Gly Cys Thr Asn Pro  
 20 25 30

Tyr Gly Lys Ser Lys Phe Phe Ile Glu Glu Met Ile Arg Asp Leu Cys  
 35 40 45

Gln Ala Asp Lys Gly Trp Thr Ala Ala Leu Gly Leu Asp Arg Met Cys  
 50 55 60

Glu Asp Leu Trp Arg Trp Gln Lys Gln Asn Pro Ser Gly Phe Gly Thr  
 65 70 75 80

Gln Ala



205

&lt;210&gt; 166

&lt;211&gt; 360

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 166

Met Ala Glu Lys Val Leu Val Thr Gly Gly Ala Gly Tyr Ile Gly Ser  
 1 5 10 15

His Thr Val Leu Glu Leu Leu Glu Ala Gly Tyr Leu Pro Val Val Ile  
 20 25 30

Asp Asn Phe His Asn Ala Phe Arg Gly Gly Gly Ser Leu Pro Glu Ser  
 35 40 45

Leu Arg Arg Val Gln Glu Leu Thr Gly Arg Ser Val Glu Phe Glu Glu  
 50 55 60

Met Asp Ile Leu Asp Gln Gly Ala Leu Gln Arg Leu Phe Lys Lys Tyr  
 65 70 75 80

Ser Phe Met Ala Val Ile His Phe Ala Gly Leu Lys Ala Val Gly Glu  
 85 90 95

Ser Val Gln Lys Pro Leu Asp Tyr Tyr Arg Val Asn Leu Thr Gly Thr  
 100 105 110

Ile Gln Leu Leu Glu Ile Met Lys Ala His Gly Val Lys Asn Leu Val  
 115 120 125

Phe Ser Ser Ser Ala Thr Val Tyr Gly Asn Pro Gln Tyr Leu Pro Leu  
 130 135 140

Asp Glu Ala His Pro Thr Gly Gly Cys Thr Asn Pro Tyr Gly Lys Ser  
 145 150 155 160

Lys Phe Phe Ile Glu Glu Met Ile Arg Asp Leu Cys Gln Ala Asp Lys  
 165 170 175

Thr Trp Asn Ala Val Leu Leu Arg Tyr Phe Asn Pro Thr Gly Ala His  
 180 185 190

Ala Ser Gly Cys Ile Gly Glu Asp Pro Gln Gly Ile Pro Asn Asn Leu  
 195 200 205

Met Pro Tyr Val Ser Gln Val Ala Ile Gly Arg Arg Glu Ala Leu Asn

206

210 215 220  
 Val Phe Gly Asn Asp Tyr Asp Thr Glu Asp Gly Thr Gly Val Arg Asp  
 225 230 235 240  
 Tyr Ile His Val Val Asp Leu Ala Lys Gly His Ile Ala Ala Leu Arg  
 245 250 255  
 Lys Leu Lys Glu Gln Cys Gly Cys Arg Val Gly Arg Glu Gly Arg Ser  
 260 265 270  
 Glu Gly Gly Glu Gly Pro Asp Pro Gly Arg Ala Ala Gln Arg Arg Gly  
 275 280 285  
 Gln Ser Ser Pro Leu His Lys Pro Cys Ser Pro Trp Ala Arg Ser Thr  
 290 295 300  
 Thr Trp Ala Arg Ala Gln Ala Ile Gln Cys Cys Arg Trp Ser Arg Leu  
 305 310 315 320  
 Trp Arg Arg Pro Leu Gly Arg Arg Ser Arg Thr Arg Trp Trp His Gly  
 325 330 335  
 Gly Lys Val Met Trp Gln Pro Val Thr Pro Thr Pro Ala Trp Pro Lys  
 340 345 350  
 Arg Ser Trp Gly Gly Gln Gln Pro  
 355 360  
 <210> 167  
 <211> 376  
 <212> PRT  
 <213> Homo sapien  
 <400> 167  
 Arg Ala Arg Gly Ser Gly Val Gly Gly Gly Ala Ser Ala Ala Ser Val  
 1 5 10 15  
 Gly Arg Gly Asn Pro Ser Arg Thr Leu Gln Ser Ser Val Thr Leu Asp  
 20 25 30  
 Lys Glu Val Trp Ile Leu Arg Phe His Leu Phe Gln Leu Gln Gly Ala  
 35 40 45  
 Met Ala Glu Lys Val Leu Val Thr Gly Gly Ala Gly Tyr Ile Gly Ser  
 50 55 60

207

His Thr Val Leu Glu Leu Leu Glu Ala Gly Tyr Leu Pro Val Val Ile  
 65 70 75 80

Asp Asn Phe His Asn Ala Phe Arg Gly Gly Gly Ser Leu Pro Glu Ser  
 85 90 95

Leu Arg Arg Val Gln Glu Leu Thr Gly Arg Ser Val Glu Phe Glu Glu  
 100 105 110

Met Asp Ile Leu Asp Gln Gly Ala Leu Gln Arg Leu Phe Lys Lys Tyr  
 115 120 125

Ser Phe Met Ala Val Ile His Phe Ala Gly Leu Lys Ala Val Gly Glu  
 130 135 140

Ser Val Gln Lys Pro Leu Asp Tyr Tyr Arg Val Asn Leu Thr Gly Thr  
 145 150 155 160

Ile Gln Leu Leu Glu Ile Met Lys Ala His Gly Val Lys Asn Leu Val  
 165 170 175

Phe Ser Ser Ser Ala Thr Val Tyr Gly Asn Pro Gln Tyr Leu Pro Leu  
 180 185 190

Asp Glu Ala His Pro Thr Gly Gly Cys Thr Asn Pro Tyr Gly Lys Ser  
 195 200 205

Lys Phe Phe Ile Glu Glu Met Ile Arg Asp Leu Cys Gln Ala Asp Lys  
 210 215 220

Thr Trp Asn Ala Val Leu Leu Arg Tyr Phe Asn Pro Thr Gly Ala His  
 225 230 235 240

Ala Ser Gly Cys Ile Gly Glu Asp Pro Gln Gly Ile Pro Asn Asn Leu  
 245 250 255

Met Pro Tyr Val Ser Gln Val Ala Ile Gly Arg Arg Glu Ala Leu Asn  
 260 265 270

Val Phe Gly Asn Asp Tyr Asp Thr Glu Asp Gly Thr Gly Val Arg Asp  
 275 280 285

Tyr Ile His Val Val Asp Leu Ala Lys Gly His Ile Ala Ala Leu Arg  
 290 295 300

208

Lys Leu Lys Glu Gln Cys Gly Cys Arg Val Gly Arg Glu Gly Arg Ser  
 305 310 315 320

Glu Gly Gly Glu Gly Pro Asp Pro Gly Arg Ala Ala Gln Arg Arg Gly  
 325 330 335

Gln Ser Ser Pro Leu His Lys Pro Cys Ser Pro Trp Ala Arg Ser Thr  
 340 345 350

Thr Trp Ala Arg Ala Gln Ala Ile Gln Cys Cys Arg Trp Ser Arg Leu  
 355 360 365

Trp Arg Arg Pro Leu Gly Arg Arg  
 370 375

<210> 168

<211> 466

<212> PRT

<213> Homo sapien

<400> 168

Met Ala Glu Lys Val Leu Val Thr Gly Gly Ala Gly Tyr Ile Gly Ser  
 1 5 10 15

His Thr Val Leu Glu Leu Leu Glu Ala Gly Tyr Leu Pro Val Val Ile  
 20 25 30

Asp Asn Phe His Asn Ala Phe Arg Gly Gly Gly Ser Leu Pro Glu Ser  
 35 40 45

Leu Arg Arg Val Gln Glu Leu Thr Gly Arg Ser Val Glu Phe Glu Glu  
 50 55 60

Met Asp Ile Leu Asp Gln Gly Ala Leu Gln Arg Leu Phe Lys Lys Tyr  
 65 70 75 80

Ser Phe Met Ala Val Ile His Phe Ala Gly Leu Lys Ala Val Gly Glu  
 85 90 95

Ser Val Gln Lys Pro Leu Asp Tyr Tyr Arg Val Asn Leu Thr Gly Thr  
 100 105 110

Ile Gln Leu Leu Glu Ile Met Lys Ala His Gly Val Lys Asn Leu Val  
 115 120 125

Phe Ser Ser Ser Ala Thr Val Tyr Gly Asn Pro Gln Tyr Leu Pro Leu  
 130 135 140

209

Asp	Glu	Ala	His	Pro	Thr	Gly	Gly	Cys	Thr	Asn	Pro	Tyr	Gly	Lys	Ser	145	150	155	160
Lys	Phe	Phe	Ile	Glu	Glu	Met	Ile	Arg	Asp	Leu	Cys	Gln	Ala	Asp	Lys	165	170	175	
Thr	Trp	Asn	Ala	Val	Leu	Leu	Arg	Tyr	Phe	Asn	Pro	Thr	Gly	Ala	His	180	185	190	
Ala	Ser	Gly	Cys	Ile	Gly	Glu	Asp	Pro	Gln	Gly	Ile	Pro	Asn	Asn	Leu	195	200	205	
Met	Pro	Tyr	Val	Ser	Gln	Val	Ala	Ile	Gly	Arg	Arg	Glu	Ala	Leu	Asn	210	215	220	
Val	Phe	Gly	Asn	Asp	Tyr	Asp	Thr	Glu	Asp	Gly	Thr	Gly	Val	Arg	Asp	225	230	235	240
Tyr	Ile	His	Val	Val	Asp	Leu	Ala	Lys	Gly	His	Ile	Ala	Ala	Leu	Arg	245	250	255	
Lys	Leu	Lys	Glu	Gln	Cys	Gly	Cys	Arg	Val	Gly	Arg	Glu	Gly	Arg	Ser	260	265	270	
Glu	Gly	Gly	Glu	Gly	Pro	Asp	Pro	Gly	Arg	Ala	Ala	Gln	Arg	Arg	Gly	275	280	285	
Gln	Ser	Ser	Pro	Leu	His	Lys	Pro	Cys	Ser	Pro	Trp	Ala	Arg	Ser	Thr	290	295	300	
Thr	Trp	Ala	Arg	Ala	Gln	Ala	Ile	Gln	Cys	Cys	Arg	Trp	Ser	Arg	Leu	305	310	315	320
Trp	Arg	Arg	Pro	Leu	Gly	Arg	Arg	Ser	Gly	Pro	Pro	Thr	Pro	Pro	Thr	325	330	335	
Ser	Pro	Thr	Ser	Pro	His	Pro	Ala	Leu	Ser	Asn	Arg	Ala	Ala	Leu	Ala	340	345	350	
Leu	Pro	Thr	His	Leu	Ser	Gly	Gly	Tyr	Leu	Ala	Leu	Pro	Ser	Leu	Leu	355	360	365	
Ser	Leu	Pro	Ser	Thr	Arg	Cys	Leu	Arg	Ala	Ser	Arg	Cys	Ser	Ala	Leu	370	375	380	

210

Leu Leu Leu Lys Asp Leu Ala Ser Ser Trp Ala Arg Ala Gly Ser Ala  
 385 390 395 400

Lys Leu Gln Leu Pro Pro Val Leu Gln Ile Pro Tyr Lys Val Val Ala  
 405 410 415

Arg Arg Glu Gly Asp Val Ala Ala Cys Tyr Ala Asn Pro Ser Leu Ala  
 420 425 430

Gln Glu Glu Leu Gly Trp Thr Ala Ala Leu Gly Leu Asp Arg Met Cys  
 435 440 445

Glu Asp Leu Trp Arg Trp Gln Lys Gln Asn Pro Ser Gly Phe Gly Thr  
 450 455 460

Gln Ala  
 465

<210> 169  
 <211> 328  
 <212> PRT  
 <213> Homo sapien

<400> 169

Met Ala Glu Lys Val Leu Val Thr Gly Gly Ala Gly Tyr Ile Gly Ser  
 1 5 10 15

His Thr Val Leu Glu Leu Leu Glu Ala Gly Tyr Leu Pro Val Val Ile  
 20 25 30

Asp Asn Phe His Asn Ala Phe Arg Gly Gly Gly Ser Leu Pro Glu Ser  
 35 40 45

Leu Arg Arg Val Gln Glu Leu Thr Gly Arg Ser Val Glu Phe Glu Glu  
 50 55 60

Met Asp Ile Leu Asp Gln Gly Ala Leu Gln Arg Leu Phe Lys Lys Tyr  
 65 70 75 80

Ser Phe Met Ala Val Ile His Phe Ala Gly Leu Lys Ala Val Gly Glu  
 85 90 95

Ser Val Gln Lys Pro Leu Asp Tyr Tyr Arg Val Asn Leu Thr Gly Thr  
 100 105 110

Ile Gln Leu Leu Glu Ile Met Lys Ala His Gly Val Lys Asn Leu Val

211

115	120	125
Phe Ser Ser Ser Ala Thr Val Tyr Gly Asn Pro Gln Tyr Leu Pro Leu		
130	135	140
Asp Glu Ala His Pro Thr Gly Gly Cys Thr Asn Pro Tyr Gly Lys Ser		
145	150	155
Lys Phe Phe Ile Glu Glu Met Ile Arg Asp Leu Cys Gln Ala Asp Lys		
165	170	175
Thr Trp Asn Ala Val Leu Leu Arg Tyr Phe Asn Pro Thr Gly Ala His		
180	185	190
Ala Ser Gly Cys Ile Gly Glu Asp Pro Gln Gly Ile Pro Asn Asn Leu		
195	200	205
Met Pro Tyr Val Ser Gln Val Ala Ile Gly Arg Arg Glu Ala Leu Asn		
210	215	220
Val Phe Gly Asn Asp Tyr Asp Thr Glu Asp Gly Thr Gly Val Arg Asp		
225	230	235
Tyr Ile His Val Val Asp Leu Ala Lys Gly His Ile Ala Ala Leu Arg		
245	250	255
Lys Leu Lys Glu Gln Cys Gly Cys Arg Val Gly Arg Glu Gly Arg Ser		
260	265	270
Glu Gly Gly Glu Gly Pro Asp Pro Gly Arg Ala Ala Gln Arg Arg Gly		
275	280	285
Gln Ser Ser Pro Leu His Lys Pro Cys Ser Pro Trp Ala Arg Ser Thr		
290	295	300
Thr Trp Ala Arg Ala Gln Ala Ile Gln Cys Cys Arg Trp Ser Arg Leu		
305	310	315
Trp Arg Arg Pro Leu Gly Arg Arg		
325		

&lt;210&gt; 170

&lt;211&gt; 178

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 170

212

Met Ala Ser Thr Ser Tyr Asp Tyr Cys Arg Val Pro Met Glu Asp Gly  
 1 5 10 15

Asp Lys Arg Cys Lys Leu Leu Leu Gly Ile Gly Ile Leu Val Leu Leu  
 20 25 30

Ile Ile Val Ile Leu Gly Val Pro Leu Ile Ile Phe Thr Ile Lys Ala  
 35 40 45

Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg  
 50 55 60

Asn Val Thr His Leu Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly  
 65 70 75 80

Phe Gln Asp Val Glu Ala Gln Ala Ala Thr Cys Asn His Thr Val Met  
 85 90 95

Ala Leu Met Ala Ser Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys  
 100 105 110

Val Glu Glu Leu Glu Gly Glu Ile Thr Thr Leu Asn His Lys Leu Gln  
 115 120 125

Asp Ala Ser Ala Glu Val Glu Arg Leu Arg Arg Glu Asn Gln Val Leu  
 130 135 140

Ser Val Arg Ile Ala Asp Lys Lys Tyr Tyr Pro Ser Ser Gln Asp Ser  
 145 150 155 160

Ser Ser Ala Ala Ala Pro Gln Gln His Asn Gln Gln Leu Gly Arg Arg  
 165 170 175

Ser Cys

<210> 171

<211> 141

<212> PRT

<213> Homo sapien

<400> 171

Leu Gln Ala Arg Leu Leu Ser Ala Lys Gly Glu Ile Trp Met Ala Ser  
 1 5 10 15

Thr Ser Tyr Asp Tyr Cys Arg Val Pro Met Glu Asp Gly Asp Lys Arg



213

20

25

30

Cys Lys Leu Leu Leu Gly Ile Gly Ile Leu Val Leu Leu Ile Ile Val  
 35 40 45

Ile Leu Gly Val Pro Leu Ile Ile Phe Thr Ile Lys Ala Asn Ser Glu  
 50 55 60

Ala Cys Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg Asn Val Thr  
 65 70 75 80

His Leu Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly Phe Gln Asp  
 85 90 95

Val Glu Ala Gln Ala Ala Thr Cys Asn His Thr Val Met Ala Leu Met  
 100 105 110

Ala Ser Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys Val Glu Glu  
 115 120 125

Leu Glu Val Thr Thr Leu Asn His Lys Leu Gln Asp Ala  
 130 135 140

<210> 172

<211> 188

<212> PRT

<213> Homo sapien

<400> 172

Met Ala Ser Thr Ser Tyr Asp Tyr Cys Arg Val Pro Met Glu Asp Gly  
 1 5 10 15

Asp Lys Arg Cys Lys Leu Leu Leu Gly Ile Gly Ile Leu Val Leu Leu  
 20 25 30

Ile Ile Val Ile Leu Gly Val Pro Leu Ile Ile Phe Thr Ile Lys Ala  
 35 40 45

Asn Ser Glu Ala Cys Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg  
 50 55 60

Asn Val Thr His Leu Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly  
 65 70 75 80

Phe Gln Asp Val Glu Ala Gln Ala Ala Thr Cys Asn His Thr Val Met  
 85 90 95

214

Ala Leu Met Ala Ser Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys  
 100 105 110

Val Glu Glu Leu Glu Val Thr Thr Leu Asn His Lys Leu Gln Asp Ala  
 115 120 125

Ser Arg Pro Gly Phe Leu Phe Ser Val Ala Pro Pro Leu Gln Thr Arg  
 130 135 140

Leu Arg Arg Glu Asn Gln Val Leu Ser Val Arg Ile Ala Asp Lys Lys  
 145 150 155 160

Tyr Tyr Pro Ser Ser Gln Asp Ser Ser Ser Ala Ala Ala Pro Gln Leu  
 165 170 175

Leu Ile Val Leu Leu Gly Leu Ser Ala Leu Leu Gln  
 180 185

<210> 173  
 <211> 78  
 <212> PRT  
 <213> Homo sapien

<400> 173

Met Pro Trp Ile Gly Gly Gly Leu Ile Ala Val Trp Gly Gly Ala Ile  
 1 5 10 15

Asn Gly Gly Gly Ser Ile Asp Gly Gly Glu Gly Leu Met Asp Gly Trp  
 20 25 30

Gly Gly Ser Ser Asp Gly Gly Gly Ala Trp Gly Arg Ala Trp Ser Gly  
 35 40 45

Ala Ser Ala Cys Cys Leu Gln Ser Ala Leu Ser Pro Ser Ser Gly Pro  
 50 55 60

Leu Gly Thr Ser Trp Lys Val Arg Pro Ala Arg Leu Phe Ala  
 65 70 75

<210> 174  
 <211> 116  
 <212> PRT  
 <213> Homo sapien

<400> 174

Met Leu Trp Val Trp Phe His Ile Thr Ala Ile Lys Leu Gln Arg Glu  
 1 5 10 15

Glu Glu Glu Ala Phe Ala Ser Ser Gln Ser Ser Gln Gly Ala Gln Ser  
20 25 30

Leu Ile Phe Ser Lys Phe Glu Gly Lys Lys Thr Asn Lys Lys Thr Arg  
35 40 45

Lys Val Thr Thr Val Lys Lys Ser Ser Val Arg Leu Pro Gly Ser Asp  
50 55 60

Gln Arg Arg Ile Leu Lys Trp Ile Pro Gly Val Cys Leu Glu Thr Ser  
65 70 75 80

Trp Pro Ala Ser Pro Ser Ala Ala Ser Thr Ser Ser Met Pro Ser Arg  
85 90 95

Ser Pro Arg Thr Ser Trp Arg Gln Gln Met Thr Ser Ser Pro Pro Ser  
100 105 110

Ser Thr Leu Phe  
115

<210>	175
<211>	360
<212>	PRT
<213>	Homo sapien

<400> 175

Met Ala Thr Lys Gly Gly Thr Val Lys Ala Ala Ser Gly Phe Asn Ala  
1 5 10 15

Met Glu Asp Ala Gln Thr Leu Arg Lys Ala Met Lys Gly Leu Ala Gln  
20 25 30

Thr Thr Arg Lys Gln Lys Ile His Gln Thr Phe Met Asn Ser Gln Leu  
35 40 45

Leu Glu Arg Gln Gly Thr Asn Leu Lys Asn Gln Asn Lys Val Ser Leu  
50 55 60

Leu Lys Leu Leu Gln Glu Thr Gly Thr Asp Glu Asp Ala Ile Ile Ser  
65 70 75 80

Val Leu Ala Tyr Arg Asn Thr Ala Gln Arg Gln Glu Ile Arg Thr Ala  
85 90 95

216

Tyr Lys Ser Thr Ile Gly Arg Asp Leu Ile Asp Asp Leu Lys Ser Glu  
 100 105 110

Leu Ser Gly Asn Phe Glu Gln Val Ile Val Gly Met Met Thr Pro Thr  
 115 120 125

Val Leu Tyr Asp Val Gln Glu Leu Arg Arg Ala Met Lys Gly Ala Gly  
 130 135 140

Thr Asp Glu Gly Cys Leu Ile Glu Ile Leu Ala Ser Arg Thr Pro Glu  
 145 150 155 160

Glu Ile Arg Arg Ile Ser Gln Thr Tyr Gln Gln Gln Tyr Gly Arg Ser  
 165 170 175

Leu Glu Asp Asp Ile Arg Ser Asp Thr Ser Phe Met Phe Gln Arg Val  
 180 185 190

Leu Val Ser Leu Ser Ala Gly Gly Arg Asp Glu Gly Asn Tyr Leu Asp  
 195 200 205

Asp Ala Leu Val Arg Gln Asp Ala Gln Asp Leu Tyr Glu Ala Gly Glu  
 210 215 220

Lys Lys Trp Gly Thr Asp Glu Val Lys Phe Leu Thr Val Leu Cys Ser  
 225 230 235 240

Arg Asn Arg Asn His Leu Leu His Val Phe Asp Glu Tyr Lys Arg Ile  
 245 250 255

Ser Gln Lys Asp Ile Glu Gln Ser Ile Lys Ser Glu Thr Ser Gly Ser  
 260 265 270

Phe Glu Asp Ala Leu Leu Ala Ile Val Lys Cys Met Arg Asn Lys Ser  
 275 280 285

Ala Tyr Phe Ala Glu Lys Leu Tyr Lys Ser Met Lys Gly Leu Gly Thr  
 290 295 300

Asp Asp Asn Thr Leu Ile Arg Val Met Val Ser Arg Ala Glu Ile Asp  
 305 310 315 320

Met Leu Asp Ile Arg Ala His Phe Lys Arg Leu Tyr Gly Lys Ser Leu  
 325 330 335

Tyr Ser Phe Ile Lys Gly Asp Thr Ser Gly Asp Tyr Arg Lys Val Leu

217

340

345

350

Leu Val Leu Cys Gly Gly Asp Asp  
 355 360

&lt;210&gt; 176

&lt;211&gt; 177

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 176

Met Tyr Thr Leu Glu Leu Phe Phe Ile Cys Phe Ser His Pro Gln Gly  
 1 5 10 15

Gly Arg Asp Glu Gly Asn Tyr Leu Asp Asp Ala Leu Val Arg Gln Asp  
 20 25 30

Ala Gln Asp Leu Tyr Glu Ala Gly Glu Lys Lys Trp Gly Thr Asp Glu  
 35 40 45

Val Lys Phe Leu Thr Val Leu Cys Ser Arg Asn Arg Asn His Leu Leu  
 50 55 60

His Val Phe Asp Glu Tyr Lys Arg Ile Ser Gln Lys Asp Ile Glu Gln  
 65 70 75 80

Ser Ile Lys Ser Glu Thr Ser Gly Ser Phe Glu Asp Ala Leu Leu Ala  
 85 90 95

Ile Val Lys Cys Met Arg Asn Lys Ser Ala Tyr Phe Ala Glu Lys Leu  
 100 105 110

Tyr Lys Ser Met Lys Gly Leu Gly Thr Asp Asp Asn Thr Leu Ile Arg  
 115 120 125

Val Met Val Ser Arg Ala Glu Ile Asp Met Leu Asp Ile Arg Ala His  
 130 135 140

Phe Lys Arg Leu Tyr Gly Lys Ser Leu Tyr Ser Phe Ile Lys Gly Asp  
 145 150 155 160

Thr Ser Gly Asp Tyr Arg Lys Val Leu Leu Val Leu Cys Gly Gly Asp  
 165 170 175

Asp

218

&lt;210&gt; 177

&lt;211&gt; 380

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 177

Met Tyr Phe Asp Trp Gly Pro Gly Glu Met Leu Val Cys Glu Thr Ser  
 1 5 10 15

Phe Asn Lys Lys Glu Lys Ser Glu Met Val Pro Ser Cys Pro Phe Ile  
 20 25 30

Tyr Ile Ile Arg Lys Asp Val Asp Val Tyr Ser Gln Ile Leu Arg Lys  
 35 40 45

Leu Phe Asn Glu Ser His Gly Ile Phe Leu Gly Leu Gln Arg Ile Asp  
 50 55 60

Glu Glu Leu Thr Gly Lys Ser Arg Lys Ser Gln Leu Val Arg Val Ser  
 65 70 75 80

Lys Asn Tyr Arg Ser Val Ile Arg Ala Cys Met Glu Glu Met His Gln  
 85 90 95

Val Ala Ile Ala Ala Lys Asp Pro Ala Asn Gly Arg Gln Phe Ser Ser  
 100 105 110

Gln Val Ser Ile Leu Ser Ala Met Glu Leu Ile Trp Asn Leu Cys Glu  
 115 120 125

Ile Leu Phe Ile Glu Val Ala Pro Ala Gly Pro Leu Leu Leu His Leu  
 130 135 140

Leu Asp Trp Val Arg Leu His Val Cys Glu Val Asp Ser Leu Ser Ala  
 145 150 155 160

Asp Val Leu Gly Ser Glu Asn Pro Ser Lys His Asp Ser Phe Trp Asn  
 165 170 175

Leu Val Thr Ile Leu Val Leu Gln Gly Arg Leu Asp Glu Ala Arg Gln  
 180 185 190

Met Leu Ser Lys Glu Ala Asp Ala Ser Pro Ala Ser Ala Gly Ile Cys  
 195 200 205

Arg Ile Met Gly Asp Leu Met Arg Thr Met Pro Ile Leu Ser Pro Gly

219

210						215						220					
Asn	Thr	Gln	Thr	Leu	Thr	Glu	Leu	Glu	Leu	Lys	Trp	Gln	His	Trp	His		
225					230					235					240		
Glu	Glu	Cys	Glu	Arg	Tyr	Leu	Gln	Asp	Ser	Thr	Phe	Ala	Thr	Ser	Pro		
				245					250					255			
His	Leu	Glu	Ser	Leu	Leu	Lys	Ile	Met	Leu	Gly	Asp	Glu	Ala	Ala	Leu		
			260					265					270				
Leu	Glu	Gln	Lys	Glu	Leu	Leu	Ser	Asn	Trp	Tyr	His	Phe	Leu	Val	Thr		
		275					280					285					
Arg	Leu	Leu	Tyr	Ser	Asn	Pro	Thr	Val	Lys	Pro	Ile	Asp	Leu	His	Tyr		
	290					295					300						
Tyr	Ala	Gln	Ser	Ser	Leu	Asp	Leu	Phe	Leu	Gly	Gly	Glu	Ser	Ser	Pro		
305					310					315					320		
Glu	Pro	Leu	Asp	Asn	Ile	Leu	Leu	Ala	Ala	Phe	Glu	Phe	Asp	Ile	His		
				325					330					335			
Gln	Val	Ile	Lys	Glu	Cys	Arg	Asn	Lys	Thr	Asp	Leu	Ser	Arg	Arg	Ser		
			340					345					350				
Leu	Leu	Asp	Ala	Gly	Ser	Ile	Lys	Gly	Glu	Ser	Ile	Leu	Leu	Phe	Pro		
		355					360					365					
Val	Ala	Glu	Glu	Lys	Glu	Lys	Tyr	His	Glu	Glu	Gly						
	370					375					380						

&lt;210&gt; 178

&lt;211&gt; 394

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 178

Glu	Leu	Arg	Leu	Leu	Ser	Tyr	Phe	Arg	Leu	Val	Cys	Phe	Pro	Ser	Gly
1				5					10					15	

Arg	Glu	Ala	Leu	Val	Pro	Phe	Pro	Arg	Leu	Ser	Cys	His	Phe	Ser	Gly
		20						25					30		

Gly	Arg	Ser	Val	Asn	Glu	Leu	Ile	Pro	Gly	Val	Asn	Ser	Lys	Lys	Asn
		35					40					45			

220

Gln Met Tyr Phe Asp Trp Gly Pro Gly Glu Met Leu Val Cys Glu Thr  
 50 55 60

Ser Phe Asn Lys Lys Glu Lys Ser Glu Met Val Pro Ser Cys Pro Phe  
 65 70 75 80

Ile Tyr Ile Ile Arg Lys Asp Val Asp Val Tyr Ser Gln Ile Leu Arg  
 85 90 95

Lys Leu Phe Asn Glu Ser His Gly Ile Phe Leu Gly Leu Gln Arg Ile  
 100 105 110

Asp Glu Glu Leu Thr Gly Lys Ser Arg Lys Ser Gln Leu Val Arg Val  
 115 120 125

Ser Lys Asn Tyr Arg Ser Val Ile Arg Ala Cys Met Glu Glu Met His  
 130 135 140

Gln Val Ala Ile Ala Ala Lys Asp Pro Ala Asn Gly Arg Gln Phe Ser  
 145 150 155 160

Ser Gln Val Ser Ile Leu Ser Ala Met Glu Leu Ile Trp Asn Leu Cys  
 165 170 175

Glu Ile Leu Phe Ile Glu Val Ala Pro Ala Gly Pro Leu Leu Leu His  
 180 185 190

Leu Leu Asp Trp Val Arg Leu His Val Cys Glu Val Asp Ser Leu Ser  
 195 200 205

Ala Asp Val Leu Gly Ser Glu Asn Pro Ser Lys His Asp Ser Phe Trp  
 210 215 220

Asn Leu Val Thr Ile Leu Val Leu Gln Gly Arg Leu Asp Glu Ala Arg  
 225 230 235 240

Gln Met Leu Ser Lys Glu Ala Asp Ala Ser Pro Ala Ser Ala Gly Ile  
 245 250 255

Cys Arg Ile Met Gly Asp Leu Met Arg Thr Met Pro Ile Leu Ser Pro  
 260 265 270

Gly Asn Thr Gln Thr Leu Thr Glu Leu Glu Leu Lys Trp Gln His Trp  
 275 280 285



221

His Glu Glu Cys Glu Arg Tyr Leu Gln Asp Ser Thr Phe Ala Thr Ser  
 290 295 300

Pro His Leu Glu Ser Leu Leu Lys Ile Met Leu Gly Asp Glu Ala Ala  
 305 310 315 320

Leu Leu Glu Gln Lys Glu Leu Leu Ser Asn Trp Tyr His Phe Leu Val  
 325 330 335

Thr Arg Leu Leu Tyr Ser Asn Pro Thr Val Lys Pro Ile Asp Leu His  
 340 345 350

Tyr Tyr Ala Gln Ser Ser Leu Asp Leu Phe Leu Gly Gly Glu Ser Ser  
 355 360 365

Pro Glu Pro Leu Asp Asn Ile Leu Leu Ala Ala Phe Glu Phe Asp Ile  
 370 375 380

His Gln Val Ile Lys Glu Cys Ser Phe Leu  
 385 390

&lt;210&gt; 179

&lt;211&gt; 679

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 179

Met Tyr Phe Asp Trp Gly Pro Gly Glu Met Leu Val Cys Glu Thr Ser  
 1 5 10 15

Phe Asn Lys Lys Glu Lys Ser Glu Met Val Pro Ser Cys Pro Phe Ile  
 20 25 30

Tyr Ile Ile Arg Lys Asp Val Asp Val Tyr Ser Gln Ile Leu Arg Lys  
 35 40 45

Leu Phe Asn Glu Ser His Gly Ile Phe Leu Gly Leu Gln Arg Ile Asp  
 50 55 60

Glu Glu Leu Thr Gly Lys Ser Arg Lys Ser Gln Leu Val Arg Val Ser  
 65 70 75 80

Lys Asn Tyr Arg Ser Val Ile Arg Ala Cys Met Glu Glu Met His Gln  
 85 90 95

Val Ala Ile Ala Ala Lys Asp Pro Ala Asn Gly Arg Gln Phe Ser Ser  
 100 105 110

222

Gln Val Ser Ile Leu Ser Ala Met Glu Leu Ile Trp Asn Leu Cys Glu  
 115 120 125

Ile Leu Phe Ile Glu Val Ala Pro Ala Gly Pro Leu Leu Leu His Leu  
 130 135 140

Leu Asp Trp Val Arg Leu His Val Cys Glu Val Asp Ser Leu Ser Ala  
 145 150 155 160

Asp Val Leu Gly Ser Glu Asn Pro Ser Lys His Asp Ser Phe Trp Asn  
 165 170 175

Leu Val Thr Ile Leu Val Leu Gln Gly Arg Leu Asp Glu Ala Arg Gln  
 180 185 190

Met Leu Ser Lys Glu Ala Asp Ala Ser Pro Ala Ser Ala Gly Ile Cys  
 195 200 205

Arg Ile Met Gly Asp Leu Met Arg Thr Met Pro Ile Leu Ser Pro Gly  
 210 215 220

Asn Thr Gln Thr Leu Thr Glu Leu Glu Leu Lys Trp Gln His Trp His  
 225 230 235 240

Glu Glu Cys Glu Arg Tyr Leu Gln Asp Ser Thr Phe Ala Thr Ser Pro  
 245 250 255

His Leu Glu Ser Leu Leu Lys Ile Met Leu Gly Asp Glu Ala Ala Leu  
 260 265 270

Leu Glu Gln Lys Glu Leu Leu Ser Asn Trp Tyr His Phe Leu Val Thr  
 275 280 285

Arg Leu Leu Tyr Ser Asn Pro Thr Val Lys Pro Ile Asp Leu His Tyr  
 290 295 300

Tyr Ala Gln Ser Ser Leu Asp Leu Phe Leu Gly Gly Glu Ser Ser Pro  
 305 310 315 320

Glu Pro Leu Asp Asn Ile Leu Leu Ala Ala Phe Glu Phe Asp Ile His  
 325 330 335

Gln Val Ile Lys Glu Cys Ser Phe Leu Leu Lys Thr Gly Gln Phe Leu  
 340 345 350

223

Ala Val Trp Gln Glu Glu Thr Ala Gly Val His Phe Thr Gly Ser Trp  
 355 360 365

Ala Arg Cys Arg Gln Phe Pro Gly Ala Leu Gln Val Leu Gln Lys Tyr  
 370 375 380

Arg Ala Lys Ser Ile Ala Leu Ser Asn Trp Trp Phe Val Ala His Leu  
 385 390 395 400

Thr Asp Leu Leu Asp His Cys Lys Leu Leu Gln Ser His Asn Leu Tyr  
 405 410 415

Phe Gly Ser Asn Met Arg Glu Phe Leu Leu Leu Glu Tyr Ala Ser Gly  
 420 425 430

Leu Phe Ala His Pro Ser Leu Trp Gln Leu Gly Val Asp Tyr Phe Asp  
 435 440 445

Tyr Cys Pro Glu Leu Gly Arg Val Ser Leu Glu Leu His Ile Glu Arg  
 450 455 460

Ile Pro Leu Asn Thr Glu Gln Lys Ala Leu Lys Val Leu Arg Ile Cys  
 465 470 475 480

Glu Gln Arg Gln Met Thr Glu Gln Val Arg Ser Ile Cys Lys Ile Leu  
 485 490 495

Ala Met Lys Ala Val Arg Asn Asn Arg Leu Gly Ser Ala Leu Ser Trp  
 500 505 510

Ser Ile Arg Ala Lys Asp Ala Ala Phe Ala Thr Leu Val Ser Asp Arg  
 515 520 525

Phe Leu Arg Asp Tyr Cys Glu Arg Gly Cys Phe Ser Asp Leu Asp Leu  
 530 535 540

Ile Asp Asn Leu Gly Pro Ala Met Met Leu Ser Asp Arg Leu Thr Phe  
 545 550 555 560

Leu Gly Lys Tyr Arg Glu Phe His Arg Met Tyr Gly Glu Lys Arg Phe  
 565 570 575

Ala Asp Ala Ala Ser Leu Leu Leu Ser Leu Met Thr Ser Arg Ile Ala  
 580 585 590

224

Pro Arg Ser Phe Trp Met Thr Leu Leu Thr Asp Ala Leu Pro Leu Leu  
 595 600 605

Glu Gln Lys Gln Val Ile Phe Ser Ala Glu Gln Thr Tyr Glu Leu Met  
 610 615 620

Arg Cys Leu Glu Asp Leu Thr Ser Arg Arg Pro Val His Gly Glu Ser  
 625 630 635 640

Asp Thr Glu Gln Leu Gln Asp Asp Asp Ile Glu Thr Thr Lys Val Glu  
 645 650 655

Met Leu Arg Leu Ser Leu Ala Arg Asn Leu Ala Arg Ala Ile Ile Arg  
 660 665 670

Glu Gly Ser Leu Glu Gly Ser  
 675

<210> 180

<211> 72

<212> PRT

<213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (45)..(45)

<223> X=any amino acid

<400> 180

Arg Cys Asn Thr Pro Thr Ser Ser Gln Ile Lys Phe Gln His Ile Leu  
 1 5 10 15

Tyr Ala Ser Val Thr Lys Gln Pro His Asn Leu Val Phe Ile Val Asp  
 20 25 30

Leu Tyr Arg Met Lys Glu Glu Asn Pro Leu Trp His Xaa Asn Glu Ser  
 35 40 45

Phe Trp Trp Gly Gln Leu Thr Arg Pro Arg Gly Gln Arg Ser Arg Ser  
 50 55 60

Glu Ser Arg Pro Thr Arg Pro Trp  
 65 70

<210> 181

<211> 77

<212> PRT

<213> Homo sapien

225

&lt;400&gt; 181

Arg Cys Asn Thr Pro Thr Ser Ser Gln Ile Lys Phe Gln His Ile Leu  
 1 5 10 15

Tyr Ala Ser Val Thr Lys Gln Pro His Asn Leu Val Phe Ile Val Asp  
 20 25 30

Leu Tyr Arg Met Lys Glu Glu Asn Pro Leu Trp His Ala Asn Glu Ile  
 35 40 45

Phe Leu Val Gly Thr Ala Asp Glu Ala Thr Arg Ala Glu Ile Gln Ile  
 50 55 60

Arg Ile Glu Ala Asn Glu Ala Leu Val Lys Ala Leu Glu  
 65 70 75

&lt;210&gt; 182

&lt;211&gt; 174

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 182

Ser Lys Cys His Val Tyr Thr Leu Asn Ile Leu Lys Ile Cys Phe Phe  
 1 5 10 15

Tyr Phe Arg Lys Phe Ile Glu Met Gly Phe Ile Asp Glu Lys Arg Ile  
 20 25 30

Ala Ile Trp Gly Trp Ser Tyr Gly Gly Tyr Val Ser Ser Leu Ala Leu  
 35 40 45

Ala Ser Gly Thr Gly Leu Phe Lys Cys Gly Ile Ala Val Ala Pro Val  
 50 55 60

Ser Ser Trp Glu Tyr Tyr Ala Ser Val Tyr Thr Glu Arg Phe Met Gly  
 65 70 75 80

Leu Pro Thr Lys Asp Asp Asn Leu Glu His Tyr Lys Asn Ser Thr Val  
 85 90 95

Met Ala Arg Ala Glu Tyr Phe Arg Asn Val Asp Tyr Leu Leu Ile His  
 100 105 110

Gly Thr Ala Asp Asp Asn Val His Phe Gln Asn Ser Ala Gln Ile Ala  
 115 120 125

226

Lys Ala Leu Val Asn Ala Gln Val Asp Phe Gln Ala Met Trp Tyr Ser  
130 135 140

Asp Gln Asn His Gly Leu Ser Gly Leu Ser Thr Asn His Leu Tyr Thr  
145 150 155 160

His Met Thr His Phe Leu Lys Gln Cys Phe Ser Leu Ser Asp  
165 170

<210> 183  
<211> 36  
<212> PRT  
<213> Homo sapien

<400> 183

Met Gln Glu Arg Asn Gly Cys Cys Glu Ile Pro Leu Arg Asn Tyr Ile  
1 5 10 15

Ile Gln Val Met Lys Ile Thr Gln Phe Tyr Phe Gln Arg Arg Thr Asp  
20 25 30

Glu Lys Gly Leu  
35

<210> 184  
<211> 215  
<212> PRT  
<213> Homo sapien

<220>  
<221> MISC\_FEATURE  
<222> (207)..(207)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (211)..(211)  
<223> X=any amino acid

<400> 184

Met Leu Pro Ala Val Gly Ser Ala Asp Glu Glu Glu Asp Pro Ala Glu  
1 5 10 15

Glu Asp Cys Pro Glu Leu Val Pro Ile Glu Thr Thr Gln Ser Glu Glu  
20 25 30

Glu Glu Lys Ser Gly Leu Gly Ala Lys Ile Pro Val Thr Ile Ile Thr  
35 40 45

227

Gly Tyr Leu Gly Ala Gly Lys Thr Thr Leu Leu Asn Tyr Ile Leu Thr  
 50 55 60

Glu Gln His Ser Lys Arg Val Ala Val Ile Leu Asn Glu Phe Gly Glu  
 65 70 75 80

Gly Ser Ala Leu Glu Lys Ser Leu Ala Val Ser Gln Gly Gly Glu Leu  
 85 90 95

Tyr Glu Glu Trp Leu Glu Leu Arg Asn Gly Cys Leu Cys Cys Ser Val  
 100 105 110

Lys Asp Ser Gly Leu Arg Ala Ile Glu Asn Leu Met Gln Lys Lys Gly  
 115 120 125

Lys Phe Asp Tyr Ile Leu Leu Glu Thr Thr Gly Leu Ala Asp Pro Gly  
 130 135 140

Ala Val Ala Ser Met Phe Trp Val Asp Ala Glu Leu Gly Ser Asp Ile  
 145 150 155 160

Tyr Leu Asp Gly Ile Ile Thr Ile Val Asp Ser Lys Tyr Gly Leu Lys  
 165 170 175

His Leu Thr Glu Glu Lys Pro Asp Gly Leu Ile Asn Glu Ala Thr Arg  
 180 185 190

Gln Val Ala Leu Ala Glu Ile Gly Pro Pro Pro Asn Phe Phe Xaa Pro  
 195 200 205

Phe Ser Xaa Lys Phe Phe Phe  
 210 215

<210> 185

<211> 133

<212> PRT

<213> Homo sapien

<400> 185

Ile Leu Cys Ile Lys Phe Phe Lys Ser Gln Ser Phe Phe Phe Leu Ile  
 1 5 10 15

Asn Trp Met Tyr Phe Thr Glu Phe Pro Thr Ala His Val Ser Phe Leu  
 20 25 30

228

Pro Phe Arg Val Asp Leu Ser Asn Val Leu Asp Leu His Ala Phe Asp  
 35 40 45

Ser Leu Ser Gly Ile Ser Leu Gln Lys Lys Leu Gln His Val Pro Gly  
 50 55 60

Thr Gln Pro His Leu Asp Gln Ser Ile Val Thr Ile Thr Phe Asp Val  
 65 70 75 80

Pro Gly Asn Ala Lys Glu Glu His Leu Asn Met Phe Ile Gln Asn Leu  
 85 90 95

Leu Trp Glu Lys Asn Val Arg Asn Lys Asp Asn His Cys Met Glu Val  
 100 105 110

Ile Arg Leu Lys Val Gln Phe Thr Val Ala Asp Phe Trp Thr Lys Ser  
 115 120 125

Phe Ser Trp Leu Leu  
 130

<210> 186

<211> 953

<212> PRT

<213> Homo sapien

<400> 186

Met Ser His Arg Gln Val His Asp Asp Leu Asn Lys Leu Leu Lys Ile  
 1 5 10 15

Met Leu Ile Asn Ser Phe Gly Ser Val Ile Ile Phe Val Phe Ile Asn  
 20 25 30

Ile Leu Ser Gln Phe Ser Ser Phe Ile Phe Ile Ser Glu Ile Ser Met  
 35 40 45

Ser Trp Asn Lys Ser Cys Val Leu Ile Ser Leu Leu Cys Asn Asn Leu  
 50 55 60

Val Cys Leu Thr Phe Leu Thr Phe Ile Ser Asn Ile Cys Phe Ile Lys  
 65 70 75 80

Asn Asn Lys His Ala Val Ile Asp Phe Ser Tyr Phe Lys Trp Met Ser  
 85 90 95

Glu Gln Val Thr Lys Ile Phe Cys Glu Phe Phe Ser Val Trp Cys Leu  
 100 105 110



229

Pro Met His Leu Arg Ile Trp Gly Leu Ser Glu Ile Val Leu Pro Cys  
 115 120 125

Tyr Gly Thr Glu Val Gly Leu Glu Ser Phe Ser Met Lys Ile Arg Cys  
 130 135 140

Pro Glu Tyr Glu Phe Leu Leu Leu Gly Pro Glu Ser Tyr Ile Lys Tyr  
 145 150 155 160

Ser Leu Lys Phe Leu Glu Ala Thr Ala Pro Ser Leu Ser Ser Val Ile  
 165 170 175

Phe Trp Ala Tyr Val Lys Ile Ile Thr Gln Ser Pro Val Phe Ile Asn  
 180 185 190

Cys Phe Phe Ile Phe Lys Pro Asn Leu Met Leu Ile Val Ile Cys Tyr  
 195 200 205

Leu Phe Ser Pro Asp Leu Asn His Trp Ile Gln Leu Asn Glu Phe Glu  
 210 215 220

Leu Ser Leu Asn Asn Ser Lys Arg Asn Asn Val Tyr Ser Asp Gly Gly  
 225 230 235 240

Asn Phe Leu Ser Thr Cys Ser Pro Ile Leu Asn Glu Val Lys Ser Asn  
 245 250 255

His Val Thr Ile Arg Val Leu Glu Lys Leu Asn Ile Leu Tyr Ile Gly  
 260 265 270

Tyr Leu Thr Pro His Phe Tyr Ile Thr Cys Tyr Ile Lys Gly Gly Gly  
 275 280 285

Ile Lys Glu Ile Gln Lys Leu Gln Arg Tyr Leu Glu Cys Thr Tyr Leu  
 290 295 300

Leu Ile Leu Phe Val Ile Ser Leu Phe His Leu Leu Ser Asn Lys Leu  
 305 310 315 320

Leu Glu Lys Phe Leu Phe Phe Ser Cys Phe Phe Ser Tyr Lys Asn Val  
 325 330 335

Phe Glu Lys Leu Ile Asn Phe Arg Ile Glu Lys Ile Ile Glu Ser Leu  
 340 345 350

230

Lys Lys Thr Tyr Phe Ile Glu Val Ile Thr Lys Ile Ile Phe Asn Leu  
 355 360 365

Asp Ser Thr Val Ile Gln Ile Leu His His Leu Pro Thr Ser Met Asn  
 370 375 380

Phe Met Tyr Lys Phe Phe Lys Ser Gln Ser Phe Phe Phe Leu Ile Asn  
 385 390 395 400

Trp Met Tyr Phe Thr Glu Phe Pro Thr Ala His Val Ser Phe Leu Pro  
 405 410 415

Phe Arg Val Asp Leu Ser Asn Val Leu Asp Leu His Ala Phe Asp Ser  
 420 425 430

Leu Ser Gly Ile Ser Leu Gln Lys Lys Leu Gln His Val Pro Gly Thr  
 435 440 445

Gln Pro His Leu Asp Gln Ser Ile Val Thr Ile Thr Phe Asp Val Pro  
 450 455 460

Gly Asn Ala Lys Glu Glu His Leu Asn Met Phe Ile Gln Asn Leu Leu  
 465 470 475 480

Trp Glu Lys Asn Val Arg Asn Lys Asp Asn His Cys Met Glu Val Ile  
 485 490 495

Arg Leu Lys Val Gln Phe Thr Val Ala Asp Phe Trp Thr Lys Ser Phe  
 500 505 510

Ser Trp Leu Leu Glu Lys Leu Tyr Leu Val Leu Asn Arg Asn Thr Gly  
 515 520 525

Phe Ser Thr Asn His Leu Cys Leu Leu Ser Phe Phe Phe Ile Ile Phe  
 530 535 540

Met Thr Glu Lys Glu Leu Trp Lys Ser Leu His Lys Ala Gly Phe Ile  
 545 550 555 560

Cys Thr Thr Phe Phe Arg Val Ala Ala Arg Thr Asn Leu Cys Ala Leu  
 565 570 575

Lys Cys Tyr Leu Leu Leu Ser Val Pro Lys Tyr Arg Glu Ile Met Leu  
 580 585 590

231

Gln Ile Ser Leu Leu Leu Asn Ile Met Leu Pro Asp Ala Phe Glu Gln  
 595 600 605

Thr Leu Asn Ile Cys Cys Thr Leu Asn Lys Val Gln Arg Thr Arg Arg  
 610 615 620

Ile Leu Val Leu Tyr Leu Glu Thr His Ser His Tyr Leu Ile Phe Gly  
 625 630 635 640

Tyr Leu Ser His Glu Arg Tyr Phe Phe Tyr Gly Ser Ser Asp Ser Gln  
 645 650 655

Ser Val Cys Leu Thr Ser Gln Leu Ser Val Tyr Ser Cys Val Phe Thr  
 660 665 670

Ser Val His Lys Val Phe Gly Glu Ile Lys Asn Ile Ile Ser Asn Glu  
 675 680 685

Ile Asn Phe Ile Pro Ile Gly Ala Ser Leu Ser Asp Asn Ser Phe Leu  
 690 695 700

Ile Ser Ala Asn Gln Tyr Thr Met Ser Ser Tyr Ser Asp Lys Tyr Asn  
 705 710 715 720

Ser Phe Ser Leu Phe Gln His Cys Ser Leu Ile Ala Thr His Phe Tyr  
 725 730 735

Asn Lys Leu Phe Asn Ile Thr Asn Ser Phe Asn Phe Ser Thr Phe Pro  
 740 745 750

Thr Lys Thr Val Lys His Tyr Ile Lys Ser Leu Ser Ile Gly Tyr Asp  
 755 760 765

Thr Tyr Phe Ile Ile Leu Phe Gln Val Leu Val Val Ile Asn Asn Thr  
 770 775 780

Glu Lys Pro Ser Ile Ile Tyr Val Leu Thr Leu Ser Leu Glu Lys Gly  
 785 790 795 800

Ile Val Gln Lys Lys Ile Asn Thr Gln Lys Pro Phe Leu Lys Ile Lys  
 805 810 815

Asn Ile Lys Lys Leu Leu Val Ile His Lys Tyr Leu Glu Leu Ser Asn  
 820 825 830

Phe Leu Ser Phe Lys Ser Leu Tyr Phe Leu Ser Glu Tyr Gln Tyr Ile

232

835

840

845

Asn Pro Leu Thr Leu Met Leu Ile Ser Ala Phe Lys Phe Glu Leu Arg  
 850 855 860

Leu Ile Asn Val Gln Ser Ile Leu Leu Gly Ala Gly Leu Val Ser Ile  
 865 870 875 880

Lys Asp Lys Ser Gln Gln Val Ile Val Gln Gly Val His Glu Leu Tyr  
 885 890 895

Asp Leu Glu Glu Thr Pro Val Ser Trp Lys Asp Asp Thr Glu Arg Thr  
 900 905 910

Asn Arg Leu Val Leu Ile Gly Arg Asn Leu Asp Lys Asp Ile Leu Lys  
 915 920 925

Gln Leu Phe Ile Ala Thr Val Thr Glu Thr Glu Lys Gln Trp Thr Thr  
 930 935 940

His Phe Lys Glu Asp Gln Val Cys Thr  
 945 950

<210> 187

<211> 194

<212> PRT

<213> Homo sapien

<400> 187

Ile Leu Cys Ile Lys Phe Phe Lys Ser Gln Ser Phe Phe Phe Leu Ile  
 1 5 10 15

Asn Trp Met Tyr Phe Thr Glu Phe Pro Thr Ala His Val Ser Phe Leu  
 20 25 30

Pro Phe Arg Val Asp Leu Ser Asn Val Leu Asp Leu His Ala Phe Asp  
 35 40 45

Ser Leu Ser Gly Ile Ser Leu Gln Lys Lys Leu Gln His Val Pro Gly  
 50 55 60

Thr Gln Pro His Leu Asp Gln Ser Ile Val Thr Ile Thr Phe Asp Val  
 65 70 75 80

Pro Gly Asn Ala Lys Glu Glu His Leu Asn Met Phe Ile Gln Asn Leu  
 85 90 95

233

Leu Trp Glu Lys Asn Val Arg Asn Lys Asp Asn His Cys Met Glu Val  
 100 105 110

Ile Arg Leu Lys Gly Leu Val Ser Ile Lys Asp Lys Ser Gln Gln Val  
 115 120 125

Ile Val Gln Gly Val His Glu Leu Tyr Asp Leu Glu Glu Thr Pro Val  
 130 135 140

Ser Trp Lys Asp Asp Thr Glu Arg Thr Asn Arg Leu Val Leu Ile Gly  
 145 150 155 160

Arg Asn Leu Asp Lys Asp Ile Leu Lys Gln Leu Phe Ile Ala Thr Val  
 165 170 175

Thr Glu Thr Glu Lys Gln Trp Thr Thr His Phe Lys Glu Asp Gln Val  
 180 185 190

Cys Thr

<210> 188

<211> 728

<212> PRT

<213> Homo sapien

<400> 188

Met Arg Leu Ser Asn Arg Gln Pro Gly Ala Leu Arg Leu Thr Ala Gly  
 1 5 10 15

Ser Leu Val Pro Leu Ser Leu Tyr Leu Arg Asn Ser Phe Phe Gly Ser  
 20 25 30

Thr Ala Glu Ala Leu Gly Glu Trp Leu Cys Leu Leu Trp Gln Arg Leu  
 35 40 45

Glu Val Leu Thr Asp Cys His Lys Tyr Tyr Ala Val Thr Ala Ala Ala  
 50 55 60

Ala Tyr Met His Val Asn Ser Trp Gly Ile Asn Leu Val Cys Ile Leu  
 65 70 75 80

Arg Ser His Ser Ser Ala Gly Arg Gly Ser Arg Arg Met Pro Phe Ser  
 85 90 95

Val Ser Pro Leu Gln Pro Tyr Thr Lys Cys Ala Pro Cys Val Ser Asn

234

100	105	110
Ser Ile Val Glu Val Ser Asp Asn Leu Thr Tyr Thr Met Ser His Ser 115 120 125		
Ser Val Ser Val Leu Phe Leu Leu Val Phe Tyr Asn Ser Phe Leu Leu 130 135 140		
Asn Phe Ser Pro Leu Tyr Lys Met Ser His Arg Gln Val His Asp Thr 145 150 155 160		
Tyr Asn Lys Leu Leu Lys Ile Met Leu Ile Asn Ser Phe Gly Ser Val 165 170 175		
Ile Ile Phe Val Phe Ile Asn Ile Leu Ser Gln Phe Ser Ser Phe Ile 180 185 190		
Phe Ile Ser Glu Ile Ser Met Ser Trp Asn Lys Ser Cys Val Leu Ile 195 200 205		
Ser Leu Leu Cys Asn Asn Leu Val Cys Leu Thr Phe Leu Thr Phe Ile 210 215 220		
Ser Asn Ile Cys Phe Ile Ile Glu Gln Lys His Ala Val Ile Asp Phe 225 230 235 240		
Ser Tyr Phe Lys Trp Met Ser Glu Gln Val Thr Lys Ile Phe Cys Glu 245 250 255		
Phe Phe Ser Val Trp Cys Leu Pro Met His Leu Arg Ile Gln Gly Leu 260 265 270		
Ser Glu Ile Val Leu Pro Cys Tyr Gly Thr Glu Val Gly Leu Glu Ser 275 280 285		
Phe Ser Met Lys Ile Arg Cys Pro Glu Tyr Glu Phe Leu Leu Leu Gly 290 295 300		
Pro Glu Ser Tyr Ile Lys Tyr Ser Leu Lys Phe Leu Glu Ala Thr Ala 305 310 315 320		
Pro Ser Leu Ser Ser Val Ile Phe Trp Ala Tyr Val Lys Ile Ile Thr 325 330 335		
Gln Ser Pro Val Phe Ile Asn Cys Phe Phe Ile Phe Lys Pro Asn Leu 340 345 350		

235

Met Leu Ile Val Ile Cys Tyr Leu Phe Ser Pro Asp Leu Asn His Trp  
 355 360 365

Ile Gln Leu Asn Glu Phe Glu Leu Ser Leu Asn Asn Ser Lys Arg Asn  
 370 375 380

Asn Val Tyr Ser Asp Gly Gly Asn Phe Leu Ser Thr Cys Ser Pro Ile  
 385 390 395 400

Leu Asn Glu Val Lys Ser Asn His Val Thr Ile Arg Val Leu Glu Lys  
 405 410 415

Leu Asn Ile Leu Tyr Ile Gly Tyr Leu Thr Pro His Phe Tyr Ile Thr  
 420 425 430

Cys Tyr Ile Lys Gly Gly Gly Ile Lys Glu Ile Gln Lys Leu Gln Arg  
 435 440 445

Tyr Leu Glu Cys Thr Tyr Leu Leu Ile Leu Phe Val Ile Ser Leu Phe  
 450 455 460

His Leu Leu Ser Asn Lys Leu Leu Glu Lys Phe Leu Phe Phe Ser Cys  
 465 470 475 480

Phe Phe Ser Tyr Lys Asn Val Phe Glu Lys Leu Ile Asn Phe Arg Ile  
 485 490 495

Glu Lys Ile Ile Glu Ser Leu Lys Lys Thr Tyr Phe Ile Glu Val Ile  
 500 505 510

Thr Lys Ile Ile Phe Asn Leu Asp Ser Thr Val Ile Gln Ile Leu His  
 515 520 525

His Leu Pro Thr Ser Met Asn Phe Met Tyr Lys Ile Phe Lys Ser Gln  
 530 535 540

Ser Phe Phe Phe Leu Ile Asn Trp Met Tyr Phe Thr Glu Phe Pro Thr  
 545 550 555 560

Ala His Val Ser Phe Leu Pro Phe Arg Val Asp Leu Ser Asn Val Leu  
 565 570 575

Asp Leu His Ala Phe Asp Ser Leu Ser Gly Ile Ser Leu Gln Lys Lys  
 580 585 590

236

Leu Gln His Val Pro Gly Thr Gln Pro His Leu Asp Gln Ser Ile Val  
 595 600 605

Thr Ile Thr Phe Asp Val Pro Gly Asn Ala Lys Glu Glu His Leu Asn  
 610 615 620

Met Phe Ile Gln Asn Leu Leu Trp Glu Lys Asn Val Arg Asn Lys Asp  
 625 630 635 640

Asn His Cys Met Glu Val Ile Arg Leu Lys Gly Leu Val Ser Ile Lys  
 645 650 655

Asp Lys Ser Gln Gln Val Ile Val Gln Gly Val His Glu Leu Tyr Asp  
 660 665 670

Leu Glu Glu Thr Pro Val Ser Trp Lys Asp Asp Thr Glu Arg Thr Asn  
 675 680 685

Arg Leu Val Leu Ile Gly Arg Asn Leu Asp Lys Asp Ile Leu Lys Gln  
 690 695 700

Leu Phe Ile Ala Thr Val Thr Glu Thr Glu Lys Gln Trp Thr Thr His  
 705 710 715 720

Phe Lys Glu Asp Gln Val Cys Thr  
 725

<210> 189  
 <211> 312  
 <212> PRT  
 <213> Homo sapien

<400> 189

Met Ala Glu Ile Ser Asp Leu Asp Arg Gln Ile Glu Gln Leu Arg Arg  
 1 5 10 15

Cys Glu Leu Ile Lys Glu Ser Glu Val Lys Ala Leu Cys Ala Lys Ala  
 20 25 30

Arg Glu Ile Leu Val Glu Glu Ser Asn Val Gln Arg Val Asp Ser Pro  
 35 40 45

Val Thr Val Cys Gly Asp Ile His Gly Gln Phe Tyr Asp Leu Lys Glu  
 50 55 60

Leu Phe Arg Val Gly Gly Asp Val Pro Glu Thr Asn Tyr Leu Phe Met



237

65		70		75		80
Gly Asp Phe Val Asp Arg Gly Phe Tyr Ser Val Glu Thr Phe Leu Leu	85	90	95			
Leu Leu Ala Leu Lys Val Arg Tyr Pro Asp Arg Ile Thr Leu Ile Arg	100	105	110			
Gly Asn His Glu Ser Arg Gln Ile Thr Gln Val Tyr Gly Phe Tyr Asp	115	120	125			
Glu Cys Leu Arg Lys Tyr Gly Ser Val Thr Val Trp Arg Tyr Cys Thr	130	135	140			
Glu Ile Phe Asp Tyr Leu Ser Leu Ser Ala Ile Ile Asp Gly Lys Ile	145	150	155			160
Phe Cys Val His Gly Gly Leu Ser Pro Ser Ile Gln Thr Leu Asp Gln	165	170	175			
Ile Arg Thr Ile Asp Arg Lys Gln Glu Val Pro His Asp Gly Pro Met	180	185	190			
Cys Asp Leu Leu Trp Ser Asp Pro Glu Asp Thr Thr Gly Trp Gly Val	195	200	205			
Ser Pro Arg Gly Ala Gly Tyr Leu Phe Gly Ser Asp Val Val Ala Gln	210	215	220			
Phe Asn Ala Ala Asn Asp Ile Asp Met Ile Cys Arg Ala His Gln Leu	225	230	235			240
Val Met Glu Gly Tyr Lys Trp His Phe Asn Glu Thr Val Leu Thr Val	245	250	255			
Trp Ser Ala Pro Asn Tyr Cys Tyr Arg Cys Gly Asn Val Ala Ala Ile	260	265	270			
Leu Glu Leu Asp Glu His Leu Gln Lys Asp Phe Ile Ile Phe Glu Ala	275	280	285			
Ala Pro Gln Glu Thr Arg Gly Asn Pro Ala Arg Pro Leu Pro Pro Pro	290	295	300			
Thr Leu Leu Ala Leu Ala Pro Leu	305	310				

238

<210> 190  
 <211> 182  
 <212> PRT  
 <213> Homo sapien

<400> 190

Met Gln Pro Leu Leu His Ser His Ser Gly Pro Pro Cys Asp Asn Thr  
 1 5 10 15

Gly Cys Pro Ser Val Ser Gly Ser Ala Pro Phe Thr Leu Met Cys Cys  
 20 25 30

Leu Asp Gly Asp Cys Met Ile Thr Val Ile Met Arg Gly Pro Gln Ala  
 35 40 45

Leu Gly Val Leu Ser Pro Leu Glu Leu Ile Cys Pro Tyr Ile Cys Cys  
 50 55 60

Pro Gly Pro Arg His Pro Thr Asp His Ile Gln Ala Pro Cys Ser Gly  
 65 70 75 80

Pro Thr Gly Leu Trp Trp Thr Trp Gly Gly Ala Arg Leu Leu Thr Leu  
 85 90 95

Lys Gly Gln Arg Trp Gln Pro Glu Lys Pro Glu Asp Ile Pro Leu His  
 100 105 110

Pro Ser Leu Ser Ala Ser Asp Thr Thr Gly Trp Gly Val Ser Pro Arg  
 115 120 125

Gly Ala Gly Tyr Leu Phe Gly Ser Asp Val Val Ala Gln Phe Asn Ala  
 130 135 140

Ala Asn Asp Ile Asp Met Ile Cys Arg Ala His Gln Leu Val Met Glu  
 145 150 155 160

Gly Tyr Lys Trp His Phe Asn Glu Thr Val Leu Thr Val Trp Ser Ala  
 165 170 175

Pro Asn Tyr Cys Tyr Arg  
 180

<210> 191  
 <211> 293  
 <212> PRT  
 <213> Homo sapien

239

&lt;400&gt; 191

Val Pro Ser Gln Ala Leu Gly Ser Gly Ser Arg Arg His Arg Cys Pro  
 1 5 10 15

Gly Arg Arg Ala Ser Cys Leu Pro Pro Arg Pro Pro Arg Cys Trp Pro  
 20 25 30

Pro Gly Arg Val Ala Ala Met Leu Leu Pro Trp Ala Thr Ser Ala Pro  
 35 40 45

Gly Leu Ala Trp Gly Pro Leu Val Leu Gly Leu Phe Gly Leu Leu Ala  
 50 55 60

Ala Ser Gln Pro Gln Ala Val Pro Pro Tyr Ala Ser Glu Asn Gln Thr  
 65 70 75 80

Cys Arg Asp Gln Glu Lys Glu Tyr Tyr Glu Pro Gln His Arg Ile Cys  
 85 90 95

Cys Ser Arg Cys Pro Pro Gly Thr Tyr Val Ser Ala Lys Cys Ser Arg  
 100 105 110

Ile Arg Asp Thr Val Cys Ala Thr Cys Ala Glu Asn Ser Tyr Asn Glu  
 115 120 125

His Trp Asn Tyr Leu Thr Ile Cys Gln Leu Cys Arg Pro Cys Asp Pro  
 130 135 140

Val Met Gly Leu Glu Glu Ile Ala Pro Cys Thr Ser Lys Arg Lys Thr  
 145 150 155 160

Gln Cys Arg Cys Gln Pro Gly Met Phe Cys Ala Ala Trp Ala Leu Glu  
 165 170 175

Cys Thr His Cys Glu Leu Leu Ser Asp Cys Pro Pro Gly Thr Glu Ala  
 180 185 190

Glu Leu Lys Asp Glu Val Gly Lys Gly Asn Asn His Cys Val Pro Cys  
 195 200 205

Lys Ala Gly His Phe Gln Asn Thr Ser Ser Pro Ser Ala Arg Cys Gln  
 210 215 220

Pro His Thr Arg Cys Glu Asn Gln Gly Leu Val Glu Ala Ala Pro Gly  
 225 230 235 240

Thr Ala Gln Ser Asp Thr Thr Cys Lys Asn Pro Leu Glu Pro Leu Pro  
245 250 255

Pro Glu Met Ser Glu Pro Ala Leu Ser Lys Gly Val Glu Asn Leu Gln  
260 265 270

Ala Leu Leu Tyr Gln Ala Ala Thr Gly Ser Ser Glu Ala Ser Phe Pro  
275 280 285

Thr Leu Ser Pro Leu  
290

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<210> 192
<211> 635
<212> PRT
<213> Homo sapien
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<400> 192

Met Leu Leu Pro Trp Ala Thr Ser Ala Pro Gly Leu Ala Trp Gly Pro  
1 5 10 15

Leu Val Leu Gly Leu Phe Gly Leu Leu Ala Ala Ser Gln Pro Gln Ala  
20 25 30

Val Pro Pro Tyr Ala Ser Glu Asn Gln Thr Cys Arg Asp Gln Glu Lys  
35 40 45

Glu Tyr Tyr Glu Pro Gln His Arg Ile Cys Cys Ser Arg Cys Pro Pro  
50 55 60

Gly Thr Tyr Val Ser Ala Lys Cys Ser Arg Ile Arg Asp Thr Val Cys  
65 70 75 80

Ala Thr Cys Ala Glu Asn Ser Tyr Asn Glu His Trp Asn Tyr Leu Thr  
85 90 95

Ile Cys Gln Leu Cys Arg Pro Cys Asp Pro Val Met Gly Leu Glu Glu  
100 105 110

Ile Ala Pro Cys Thr Ser Lys Arg Lys Thr Gln Cys Arg Cys Gln Pro  
115 120 125

Gly Met Phe Cys Ala Ala Trp Ala Leu Glu Cys Thr His Cys Glu Leu  
130 135 140

241

Leu	Ser	Asp	Cys	Pro	Pro	Gly	Thr	Glu	Ala	Glu	Leu	Lys	Asp	Glu	Val
145					150					155					160
Gly	Lys	Gly	Asn	Asn	His	Cys	Val	Pro	Cys	Lys	Ala	Gly	His	Phe	Gln
			165						170					175	
Asn	Thr	Ser	Ser	Pro	Ser	Ala	Arg	Cys	Gln	Pro	His	Thr	Arg	Cys	Glu
			180					185					190		
Asn	Gln	Gly	Leu	Val	Glu	Ala	Ala	Pro	Gly	Thr	Ala	Gln	Ser	Asp	Thr
		195					200					205			
Thr	Cys	Lys	Asn	Pro	Leu	Glu	Pro	Leu	Pro	Pro	Glu	Met	Ser	Glu	Pro
	210					215					220				
Ala	Leu	Ser	Lys	Gly	Val	Glu	Asn	Leu	Gln	Ala	Leu	Leu	Tyr	Gln	Ala
225					230					235					240
Ala	Thr	Gly	Ser	Ser	Glu	Ala	Ser	Phe	Pro	Thr	Leu	Ser	Pro	Leu	Tyr
				245					250					255	
Thr	Pro	Pro	Gln	Val	Gln	Val	Gln	Gln	Gly	Asn	Pro	Glu	Leu	Leu	Tyr
			260					265					270		
Ser	Ser	Pro	Ser	Val	Gln	Trp	Leu	Arg	Pro	Gln	Lys	Cys	Gly	Ser	Ser
		275					280					285			
Leu	Cys	Leu	Phe	Thr	Thr	Pro	Ser	Pro	Thr	Leu	Pro	Tyr	Cys	Leu	Pro
	290					295					300				
Ile	Pro	Leu	Pro	Asp	Leu	Glu	Asn	Gln	Leu	Pro	Lys	Leu	Pro	Ser	Cys
305					310					315					320
Thr	His	Lys	Pro	Ala	Gln	Ser	Trp	Ser	Leu	Ser	Arg	Arg	Ala	Pro	Thr
				325					330					335	
Pro	Pro	Pro	Asn	Met	Pro	Ile	His	Asp	Thr	Val	Ser	Pro	Gly	Cys	Gln
			340					345					350		
Glu	Val	Leu	Lys	Ser	Asn	Leu	Val	Pro	Leu	Leu	Tyr	Asn	Pro	Arg	Glu
		355					360					365			
Val	Ser	Leu	Ile	Leu	Pro	Leu	Gly	Ala	Ala	Leu	Cys	Leu	Glu	Gly	Lys
		370				375					380				
Lys	Leu	Leu	Pro	Phe	Leu	Cys	Leu	Gly	Cys	Pro	Gly	Ile	Trp	Lys	Ala

242

385		390		395		400									
Leu	Pro	Ser	Pro	Pro	Pro	Ser	Ala	Leu	Leu	Gly	Ala	Val	Ile	Thr	Leu
			405						410					415	
Leu	Ser	Ala	Val	Leu	Ala	Gly	Thr	Met	Leu	Met	Leu	Ala	Val	Leu	Leu
			420					425						430	
Pro	Leu	Ala	Phe	Phe	Leu	Leu	Leu	Ala	Thr	Val	Phe	Ser	Cys	Ile	Trp
		435					440					445			
Lys	Ser	His	Pro	Ser	Leu	Cys	Arg	Lys	Leu	Gly	Ser	Leu	Leu	Lys	Arg
	450					455					460				
Arg	Pro	Gln	Gly	Glu	Gly	Pro	Asn	Pro	Val	Ala	Gly	Ser	Trp	Glu	Pro
465					470					475					480
Pro	Lys	Ala	His	Pro	Tyr	Phe	Pro	Asp	Leu	Val	Gln	Pro	Leu	Leu	Pro
			485						490					495	
Ile	Ser	Gly	Asp	Val	Ser	Pro	Val	Ser	Thr	Gly	Leu	Pro	Ala	Ala	Pro
			500					505					510		
Val	Leu	Glu	Ala	Gly	Val	Pro	Gln	Gln	Gln	Ser	Pro	Leu	Asp	Leu	Thr
		515					520					525			
Arg	Glu	Pro	Gln	Leu	Glu	Pro	Gly	Glu	Gln	Ser	Gln	Val	Ala	His	Gly
	530					535					540				
Thr	Asn	Gly	Ile	His	Val	Thr	Gly	Gly	Ser	Met	Thr	Ile	Thr	Gly	Asn
545				550						555					560
Ile	Tyr	Ile	Tyr	Asn	Gly	Pro	Val	Leu	Gly	Gly	Pro	Pro	Gly	Pro	Gly
				565					570					575	
Asp	Leu	Pro	Ala	Thr	Pro	Glu	Pro	Pro	Tyr	Pro	Ile	Pro	Glu	Glu	Gly
			580					585					590		
Asp	Pro	Gly	Pro	Pro	Gly	Leu	Ser	Thr	Pro	His	Gln	Glu	Asp	Gly	Lys
		595					600					605			
Ala	Trp	His	Leu	Ala	Glu	Thr	Glu	His	Cys	Gly	Ala	Thr	Pro	Ser	Asn
	610					615					620				
Arg	Gly	Pro	Arg	Asn	Gln	Phe	Ile	Thr	His	Asp					
625				630						635					

243

<210> 193  
<211> 166  
<212> PRT  
<213> Homo sapien

<400> 193

Met Leu Leu Pro Trp Ala Thr Ser Ala Pro Gly Leu Ala Trp Gly Pro  
1 5 10 15

Leu Val Leu Gly Leu Phe Gly Leu Leu Ala Ala Ser Gln Pro Gln Ala  
20 25 30

Val Pro Pro Tyr Ala Ser Glu Asn Gln Thr Cys Arg Asp Gln Glu Lys  
35 40 45

Glu Tyr Tyr Glu Pro Gln His Arg Ile Cys Cys Ser Arg Cys Pro Pro  
50 55 60

Gly Thr Tyr Val Ser Ala Lys Cys Ser Arg Ile Arg Asp Thr Val Cys  
65 70 75 80

Ala Thr Cys Ala Glu Asn Ser Tyr Asn Glu His Trp Asn Tyr Leu Thr  
85 90 95

Ile Cys Gln Leu Cys Arg Pro Cys Asp Pro Val Met Gly Leu Glu Glu  
100 105 110

Ile Ala Pro Cys Thr Ser Lys Arg Lys Thr Gln Cys Arg Cys Gln Pro  
115 120 125

Gly Met Phe Cys Ala Ala Trp Ala Leu Glu Cys Thr His Cys Glu Leu  
130 135 140

Leu Ser Asp Cys Pro Pro Gly Thr Glu Ala Glu Leu Lys Gly Gln Arg  
145 150 155 160

Ser Leu Arg Gly Trp Met  
165

<210> 194  
<211> 305  
<212> PRT  
<213> Homo sapien

<400> 194

Gly Leu Lys Glu Thr His Arg Pro Ala Lys Gly Pro Ser Leu Leu Pro

244

1		5						10					15				
Ile	His	Pro	Gly	Trp	Pro	Ala	Phe	Leu	Leu	Pro	Asp	Glu	Val	Gly	Lys		
			20					25					30				
Gly	Asn	Asn	His	Cys	Val	Pro	Cys	Lys	Ala	Gly	His	Phe	Gln	Asn	Thr		
		35					40					45					
Ser	Ser	Pro	Ser	Ala	Arg	Cys	Gln	Pro	His	Thr	Arg	Cys	Glu	Asn	Gln		
	50					55					60						
Gly	Leu	Val	Glu	Ala	Ala	Pro	Gly	Thr	Ala	Gln	Ser	Asp	Thr	Thr	Cys		
65					70					75					80		
Lys	Asn	Pro	Leu	Glu	Pro	Leu	Pro	Pro	Glu	Met	Ser	Gly	Thr	Met	Leu		
				85					90					95			
Met	Leu	Ala	Val	Leu	Leu	Pro	Leu	Ala	Phe	Phe	Leu	Leu	Leu	Ala	Thr		
			100					105						110			
Val	Phe	Ser	Cys	Ile	Trp	Lys	Ser	His	Pro	Ser	Leu	Cys	Arg	Lys	Leu		
		115					120					125					
Gly	Ser	Leu	Leu	Lys	Arg	Arg	Pro	Gln	Gly	Glu	Gly	Pro	Asn	Pro	Val		
	130					135					140						
Ala	Gly	Ser	Trp	Glu	Pro	Pro	Lys	Ala	His	Pro	Tyr	Phe	Pro	Asp	Leu		
145					150					155					160		
Val	Gln	Pro	Leu	Leu	Pro	Ile	Ser	Gly	Asp	Val	Ser	Pro	Val	Ser	Thr		
				165					170					175			
Gly	Leu	Pro	Ala	Ala	Pro	Val	Leu	Glu	Ala	Gly	Val	Pro	Gln	Gln	Gln		
			180					185					190				
Ser	Pro	Leu	Asp	Leu	Thr	Arg	Glu	Pro	Gln	Leu	Glu	Pro	Gly	Glu	Gln		
		195					200					205					
Ser	Gln	Val	Ala	His	Gly	Thr	Asn	Gly	Ile	His	Val	Thr	Gly	Gly	Ser		
	210					215					220						
Met	Thr	Ile	Thr	Gly	Asn	Ile	Tyr	Ile	Tyr	Asn	Gly	Pro	Val	Leu	Gly		
225					230					235					240		
Gly	Pro	Pro	Gly	Pro	Gly	Asp	Leu	Pro	Ala	Thr	Pro	Glu	Pro	Pro	Tyr		
				245					250					255			



245

Pro Ile Pro Glu Glu Gly Asp Pro Gly Pro Pro Gly Leu Ser Thr Pro  
 260 265 270

His Gln Glu Asp Gly Lys Ala Trp His Leu Ala Glu Thr Glu His Cys  
 275 280 285

Gly Ala Thr Pro Ser Asn Arg Gly Pro Arg Asn Gln Phe Ile Thr His  
 290 295 300

Asp  
 305

<210> 195  
 <211> 194  
 <212> PRT  
 <213> Homo sapien

<400> 195

Lys Lys Arg Glu Gly Gly Arg Glu Lys Lys Gly Ser Gly Ala Leu Ile  
 1 5 10 15

Ile Val Trp Val Ser Ile Ser Phe Leu Gln Gly Glu Gly Pro Asn Pro  
 20 25 30

Val Ala Gly Ser Trp Glu Pro Pro Lys Ala His Pro Tyr Phe Pro Asp  
 35 40 45

Leu Val Gln Pro Leu Leu Pro Ile Ser Gly Asp Val Ser Pro Val Ser  
 50 55 60

Thr Gly Leu Pro Ala Ala Pro Val Leu Glu Ala Gly Val Pro Gln Gln  
 65 70 75 80

Gln Ser Pro Leu Asp Leu Thr Arg Glu Pro Gln Leu Glu Pro Gly Glu  
 85 90 95

Gln Ser Gln Val Ala His Gly Thr Asn Gly Ile His Val Thr Gly Gly  
 100 105 110

Ser Met Thr Ile Thr Gly Asn Ile Tyr Ile Tyr Asn Gly Pro Val Leu  
 115 120 125

Gly Gly Pro Pro Gly Pro Gly Asp Leu Pro Ala Thr Pro Glu Pro Pro  
 130 135 140

246

Tyr Pro Ile Pro Glu Glu Gly Asp Pro Gly Pro Pro Gly Leu Ser Thr  
 145 150 155 160

Pro His Gln Glu Asp Gly Lys Ala Trp His Leu Ala Glu Thr Glu His  
 165 170 175

Cys Gly Ala Thr Pro Ser Asn Arg Gly Pro Arg Asn Gln Phe Ile Thr  
 180 185 190

His Asp

<210> 196

<211> 241

<212> PRT

<213> Homo sapien

<400> 196

Met Ala Thr Gly Leu Ser Glu His His Asn Met Val Trp Glu Val Lys  
 1 5 10 15

Thr Asn Gln Met Pro Asn Ala Val Gln Lys Leu Leu Leu Val Met Asp  
 20 25 30

Lys Arg Ala Ser Gly Met Asn Asp Ser Leu Glu Leu Leu Gln Cys Asn  
 35 40 45

Glu Asn Leu Pro Ser Ser Pro Gly Tyr Asn Ser Cys Asp Glu His Met  
 50 55 60

Glu Leu Asp Asp Leu Pro Glu Leu Gln Ala Val Gln Ser Asp Pro Thr  
 65 70 75 80

Gln Ser Gly Met Tyr Gln Leu Ser Ser Asp Val Ser His Gln Glu Tyr  
 85 90 95

Pro Arg Ser Ser Trp Asn Gln Asn Thr Ser Asp Ile Pro Glu Thr Thr  
 100 105 110

Tyr Arg Glu Asn Glu Val Asp Trp Leu Thr Glu Leu Ala Asn Ile Ala  
 115 120 125

Thr Ser Pro Gln Ser Pro Leu Met Gln Cys Ser Phe Tyr Asn Arg Ser  
 130 135 140

Ser Pro Val His Ile Ile Ala Thr Ser Lys Ser Leu His Ser Tyr Ala  
 145 150 155 160

247

Arg Pro Pro Pro Val Ser Ser Ser Ser Lys Ser Glu Pro Ala Phe Pro  
 165 170 175

His His His Trp Lys Glu Glu Thr Pro Val Arg His Glu Arg Ala Asn  
 180 185 190

Ser Glu Ser Glu Ser Gly Ile Phe Cys Met Ser Ser Leu Ser Asp Asp  
 195 200 205

Asp Asp Leu Gly Trp Cys Asn Ser Trp Pro Ser Thr Val Trp His Cys  
 210 215 220

Phe Leu Lys Ala Met Thr Ser His Leu Trp Ile Leu Leu Gln Phe Met  
 225 230 235 240

Cys

<210> 197  
 <211> 261  
 <212> PRT  
 <213> Homo sapien

<400> 197

Met Thr Gly Leu Ala Leu Leu Tyr Ser Gly Val Phe Val Ala Phe Trp  
 1 5 10 15

Ala Cys Ala Leu Ala Val Gly Val Cys Tyr Thr Ile Phe Asp Leu Gly  
 20 25 30

Phe Arg Phe Asp Val Ala Trp Phe Leu Thr Glu Thr Ser Pro Phe Met  
 35 40 45

Trp Ser Asn Leu Gly Ile Gly Leu Ala Ile Ser Leu Ser Val Val Gly  
 50 55 60

Ala Ala Trp Gly Ile Tyr Ile Thr Gly Ser Ser Ile Ile Gly Gly Gly  
 65 70 75 80

Val Lys Ala Pro Arg Ile Lys Thr Lys Asn Leu Val Ser Ile Ile Phe  
 85 90 95

Cys Glu Ala Val Ala Ile Tyr Gly Ile Ile Met Ala Ile Val Ile Ser  
 100 105 110

248

Asn Met Ala Glu Pro Phe Ser Ala Thr Asp Pro Lys Ala Ile Gly His  
 115 120 125

Arg Asn Tyr His Ala Gly Tyr Ser Met Phe Gly Ala Gly Leu Thr Val  
 130 135 140

Gly Leu Ser Asn Leu Phe Cys Gly Val Cys Val Gly Ile Val Gly Ser  
 145 150 155 160

Gly Ala Ala Leu Ala Asp Ala Gln Asn Pro Ser Leu Phe Val Lys Ile  
 165 170 175

Leu Ile Val Glu Ile Phe Gly Ser Ala Ile Gly Leu Phe Gly Val Ile  
 180 185 190

Val Ala Ile Leu Gln Val Met Asn Pro Leu Gly Lys Pro Leu Cys Pro  
 195 200 205

Cys Pro Gln Pro Ser Leu Thr Leu Leu Leu Glu Lys Leu Lys Cys Ser  
 210 215 220

Pro Ser Leu Pro Ile Thr Ile Asp Ser Pro Lys Gln Leu Pro Pro Pro  
 225 230 235 240

His Phe His Leu Leu Val Phe Ser Tyr Arg Gly Ser Leu Phe Leu Ser  
 245 250 255

Leu Ile Trp Cys His  
 260

<210> 198

<211> 499

<212> PRT

<213> Homo sapien

<400> 198

Met Ala Pro Ala Arg Thr Met Ala Arg Ala Arg Leu Ala Pro Ala Gly  
 1 5 10 15

Ile Pro Ala Val Ala Leu Trp Leu Leu Cys Thr Leu Gly Leu Gln Gly  
 20 25 30

Thr Gln Ala Gly Pro Pro Pro Ala Pro Pro Gly Leu Pro Ala Gly Ala  
 35 40 45

Asp Cys Leu Asn Ser Phe Thr Ala Gly Val Pro Gly Phe Val Leu Asp  
 50 55 60

249

Thr	Asn	Ala	Ser	Val	Ser	Asn	Gly	Ala	Thr	Phe	Leu	Glu	Ser	Pro	Thr	
65					70					75					80	
Val	Arg	Arg	Gly	Trp	Asp	Cys	Val	Arg	Ala	Cys	Cys	Thr	Thr	Gln	Asn	
			85						90					95		
Cys	Asn	Leu	Ala	Leu	Val	Glu	Leu	Gln	Pro	Asp	Arg	Gly	Glu	Asp	Ala	
		100						105					110			
Ile	Ala	Ala	Cys	Phe	Leu	Ile	Asn	Cys	Leu	Tyr	Glu	Gln	Asn	Phe	Val	
	115						120					125				
Cys	Lys	Phe	Ala	Pro	Arg	Glu	Gly	Phe	Ile	Asn	Tyr	Leu	Thr	Arg	Glu	
	130					135					140					
Val	Tyr	Arg	Ser	Tyr	Arg	Gln	Leu	Arg	Thr	Gln	Gly	Phe	Gly	Gly	Ser	
145					150					155					160	
Gly	Ile	Pro	Lys	Ala	Trp	Ala	Gly	Ile	Asp	Leu	Lys	Val	Gln	Pro	Gln	
			165						170						175	
Glu	Pro	Leu	Val	Leu	Lys	Asp	Val	Glu	Asn	Thr	Asp	Trp	Arg	Leu	Leu	
		180						185					190			
Arg	Gly	Asp	Thr	Asp	Val	Arg	Val	Glu	Arg	Lys	Asp	Pro	Asn	Gln	Val	
		195					200					205				
Glu	Leu	Trp	Gly	Leu	Lys	Glu	Gly	Thr	Tyr	Leu	Phe	Gln	Leu	Thr	Val	
	210					215					220					
Thr	Ser	Ser	Asp	His	Pro	Glu	Asp	Thr	Ala	Asn	Val	Thr	Val	Thr	Val	
225					230					235					240	
Leu	Ser	Thr	Lys	Gln	Thr	Glu	Asp	Tyr	Cys	Leu	Ala	Ser	Asn	Lys	Val	
			245						250					255		
Gly	Arg	Cys	Arg	Gly	Ser	Phe	Pro	Arg	Trp	Tyr	Tyr	Asp	Pro	Thr	Glu	
		260						265					270			
Gln	Ile	Cys	Lys	Ser	Phe	Val	Tyr	Gly	Gly	Cys	Leu	Gly	Asn	Lys	Asn	
		275					280					285				
Asn	Tyr	Leu	Arg	Glu	Glu	Glu	Cys	Ile	Leu	Ala	Cys	Arg	Gly	Val	Gln	
	290					295					300					

250

Gly Gly Pro Leu Arg Gly Ser Ser Gly Ala Gln Ala Thr Phe Pro Gln  
 305 310 315 320

Gly Pro Ser Met Glu Arg Arg His Pro Val Cys Ser Gly Thr Cys Gln  
 325 330 335

Pro Thr Gln Phe Arg Cys Ser Asn Gly Cys Cys Ile Asp Ser Phe Leu  
 340 345 350

Glu Cys Asp Asp Thr Pro Asn Cys Pro Asp Ala Ser Asp Glu Ala Ala  
 355 360 365

Cys Glu Lys Tyr Thr Ser Gly Phe Asp Glu Leu Gln Arg Ile His Phe  
 370 375 380

Pro Ser Asp Lys Gly His Cys Val Asp Leu Pro Asp Thr Gly Leu Cys  
 385 390 395 400

Lys Glu Ser Ile Pro Arg Trp Tyr Tyr Asn Pro Phe Ser Glu His Cys  
 405 410 415

Ala Arg Phe Thr Tyr Gly Gly Cys Tyr Gly Asn Lys Asn Asn Phe Glu  
 420 425 430

Glu Glu Gln Gln Cys Leu Glu Ser Cys Arg Gly Ile Ser Ser Glu Trp  
 435 440 445

Ala Ser Glu Arg Val Gly Met Tyr Gly Gly Arg Leu Ser Gln Trp Pro  
 450 455 460

Pro Leu Cys Pro Gln Ala Phe Gly Ser His Pro Ser Ile Leu Arg Ala  
 465 470 475 480

Pro Gly Val Gly Val Gly Glu Asp Ala Ser Val Arg Ser Gly Ala Leu  
 485 490 495

Gly Ser Ser

<210> 199

<211> 344

<212> PRT

<213> Homo sapien

<400> 199

Met Ala Pro Ala Arg Thr Met Ala Arg Ala Arg Leu Ala Pro Ala Gly

251

1		5						10					15				
Ile	Pro	Ala	Val	Ala	Leu	Trp	Leu	Leu	Cys	Thr	Leu	Gly	Leu	Gln	Gly		
			20					25					30				
Thr	Gln	Ala	Gly	Pro	Pro	Pro	Ala	Pro	Pro	Gly	Leu	Pro	Ala	Gly	Ala		
			35				40					45					
Asp	Cys	Leu	Asn	Ser	Phe	Thr	Ala	Gly	Val	Pro	Gly	Phe	Val	Leu	Asp		
	50					55					60						
Thr	Asn	Ala	Ser	Val	Ser	Asn	Gly	Ala	Thr	Phe	Leu	Glu	Ser	Pro	Thr		
65					70					75					80		
Val	Arg	Arg	Gly	Trp	Asp	Cys	Val	Arg	Ala	Cys	Cys	Thr	Thr	Gln	Asn		
				85				90						95			
Cys	Asn	Leu	Ala	Leu	Val	Glu	Leu	Gln	Pro	Asp	Arg	Gly	Glu	Asp	Ala		
			100					105					110				
Ile	Ala	Ala	Cys	Phe	Leu	Ile	Asn	Cys	Leu	Tyr	Glu	Gln	Asn	Phe	Val		
		115					120					125					
Cys	Lys	Phe	Ala	Pro	Arg	Glu	Gly	Phe	Ile	Asn	Tyr	Leu	Thr	Arg	Glu		
	130					135					140						
Val	Tyr	Arg	Ser	Tyr	Arg	Gln	Leu	Arg	Thr	Gln	Gly	Phe	Gly	Gly	Ser		
145					150					155					160		
Gly	Ile	Pro	Lys	Ala	Trp	Ala	Gly	Ile	Asp	Leu	Lys	Val	Gln	Pro	Gln		
				165				170						175			
Glu	Pro	Leu	Val	Leu	Lys	Asp	Val	Glu	Asn	Thr	Asp	Trp	Arg	Leu	Leu		
			180					185					190				
Arg	Gly	Asp	Thr	Asp	Val	Arg	Val	Glu	Arg	Lys	Asp	Pro	Asn	Gln	Val		
		195					200					205					
Glu	Leu	Trp	Gly	Leu	Lys	Glu	Gly	Thr	Tyr	Leu	Phe	Gln	Leu	Thr	Val		
	210					215					220						
Thr	Ser	Ser	Asp	His	Pro	Glu	Asp	Thr	Ala	Asn	Val	Thr	Val	Thr	Val		
225					230					235					240		
Leu	Ser	Thr	Lys	Gln	Thr	Glu	Asp	Tyr	Cys	Leu	Ala	Ser	Asn	Lys	Val		
				245					250					255			

252

Gly Arg Cys Arg Gly Ser Phe Pro Arg Trp Tyr Tyr Asp Pro Thr Glu  
260 265 270

Gln Ile Cys Lys Ser Phe Val Tyr Gly Gly Cys Leu Gly Asn Lys Asn  
275 280 285

Asn Tyr Leu Arg Glu Glu Glu Cys Ile Leu Ala Cys Arg Gly Val Gln  
290 295 300

Gly Gly Pro Leu Arg Gly Ser Ser Gly Ala Gln Ala Thr Phe Pro Gln  
305 310 315 320

Gly Pro Ser Met Glu Arg Arg His Pro Gly Gly Leu Tyr Ser Pro Pro  
325 330 335

His Pro Pro Ser Pro Pro His Leu  
340

<210> 200  
<211> 479  
<212> PRT  
<213> Homo sapien

<400> 200

Arg Asn Gln Gly Glu Lys Ala Ala Glu Pro Gln Leu Ser Glu His Arg  
1 5 10 15

Val Gly Ser Arg Asp Pro Ser Arg Ala Gly Ser Trp Asp Arg Asn Leu  
20 25 30

Gly Gly Pro Gly Pro Thr Gln Leu Thr Cys Ala Gly His Gln His Pro  
35 40 45

Arg Asn Pro Glu Ala Arg Ala Leu Lys Val Thr Pro Leu Gly Arg Lys  
50 55 60

Ala Met Ala Pro Ala Arg Thr Met Ala Arg Ala Arg Leu Ala Pro Ala  
65 70 75 80

Gly Ile Pro Ala Val Ala Leu Trp Leu Leu Cys Thr Leu Gly Leu Gln  
85 90 95

Gly Thr Gln Ala Gly Pro Pro Pro Ala Pro Pro Gly Leu Pro Ala Gly  
100 105 110



253

Ala Asp Cys Leu Asn Ser Phe Thr Ala Gly Val Pro Gly Phe Val Leu  
 115 120 125

Asp Thr Asn Ala Ser Val Ser Asn Gly Ala Thr Phe Leu Glu Ser Pro  
 130 135 140

Thr Val Arg Arg Gly Trp Asp Cys Val Arg Ala Cys Cys Thr Thr Gln  
 145 150 155 160

Asn Cys Asn Leu Ala Leu Val Glu Leu Gln Pro Asp Arg Gly Glu Asp  
 165 170 175

Ala Ile Ala Ala Cys Phe Leu Ile Asn Cys Leu Tyr Glu Gln Asn Phe  
 180 185 190

Val Cys Lys Phe Ala Pro Arg Glu Gly Phe Ile Asn Tyr Leu Thr Arg  
 195 200 205

Glu Val Tyr Arg Ser Tyr Arg Gln Leu Arg Thr Gln Gly Phe Gly Gly  
 210 215 220

Ser Gly Ile Pro Lys Ala Trp Ala Gly Ile Asp Leu Lys Val Gln Pro  
 225 230 235 240

Gln Glu Pro Leu Val Leu Lys Asp Val Glu Asn Thr Asp Trp Arg Leu  
 245 250 255

Leu Arg Gly Asp Thr Asp Val Arg Val Glu Arg Lys Asp Pro Asn Gln  
 260 265 270

Val Glu Leu Trp Gly Leu Lys Glu Gly Thr Tyr Leu Phe Gln Leu Thr  
 275 280 285

Val Thr Ser Ser Asp His Pro Glu Asp Thr Ala Asn Val Thr Val Thr  
 290 295 300

Val Leu Ser Thr Lys Gln Thr Glu Asp Tyr Cys Leu Ala Ser Asn Lys  
 305 310 315 320

Val Gly Arg Cys Arg Gly Ser Phe Pro Arg Trp Tyr Tyr Asp Pro Thr  
 325 330 335

Glu Gln Ile Cys Lys Ser Phe Val Tyr Gly Gly Cys Leu Gly Asn Lys  
 340 345 350

Asn Asn Tyr Leu Arg Glu Glu Glu Cys Ile Leu Ala Cys Arg Gly Val

254

355

360

365

Gln Gly Gly Pro Leu Arg Gly Ser Ser Gly Ala Gln Ala Thr Phe Pro  
 370 375 380

Gln Gly Pro Ser Met Glu Arg Arg His Pro Val Cys Ser Gly Thr Cys  
 385 390 395 400

Gln Pro Thr Gln Phe Arg Cys Ser Asn Gly Cys Cys Ile Asp Ser Phe  
 405 410 415

Leu Glu Cys Asp Asp Thr Pro Asn Cys Pro Asp Ala Ser Asp Glu Ala  
 420 425 430

Ala Cys Glu Lys Tyr Thr Ser Gly Phe Asp Glu Leu Gln Arg Ile His  
 435 440 445

Phe Pro Ser Asp Lys Gly Glu Ile Leu Pro Arg Cys Pro Gly Ser Gly  
 450 455 460

Gln Thr Leu Thr Leu Pro Ser Ser Leu Phe Pro Ser Ser Ser Ala  
 465 470 475

<210> 201

<211> 121

<212> PRT

<213> Homo sapien

<400> 201

Met Val Arg Ile Leu Ala Asn Gly Glu Ile Val Gln Asp Asp Asp Pro  
 1 5 10 15

Arg Val Arg Thr Thr Thr Gln Pro Pro Arg Gly Ser Ile Pro Arg Gln  
 20 25 30

Ser Phe Phe Asn Arg Gly His Gly Ala Pro Pro Gly Gly Pro Gly Pro  
 35 40 45

Arg Gln Gln Gln Ala Gly Ala Arg Leu Gly Ala Ala Gln Ser Pro Phe  
 50 55 60

Asn Asp Leu Asn Arg Gln Leu Val Asn Met Gly Phe Pro Gln Trp His  
 65 70 75 80

Leu Gly Asn His Ala Val Glu Pro Val Thr Ser Ile Leu Leu Leu Phe  
 85 90 95

255

Leu Leu Met Met Leu Gly Val Arg Gly Leu Leu Leu Val Gly Leu Val  
 100 105 110

Tyr Leu Val Ser His Leu Ser Gln Arg  
 115 120

<210> 202  
 <211> 149  
 <212> PRT  
 <213> Homo sapien

<400> 202

Glu Gln Ala Tyr Leu Glu Gly Ile Trp Trp Cys Leu Glu Gly Met Ile  
 1 5 10 15

Arg Glu Gly Thr Thr Gly Val Cys Phe Pro Phe Val Leu Ser Val Arg  
 20 25 30

Gln Arg Glu Thr Leu Val Gln His Phe Gln Ser Val Gly Gly Ser Val  
 35 40 45

Gly Ser Arg Asp Thr Phe Arg Trp Tyr Gly Ala Cys Ile Lys Trp His  
 50 55 60

Lys Ile Arg Ala Arg Lys Arg Cys Pro Ser Gln Phe Ser Gln Ser Phe  
 65 70 75 80

Tyr Ala Glu Lys Ile Ser Ala Gly Cys Gln His Val Pro Met Pro Val  
 85 90 95

Glu Asp Met Pro Thr Ser Pro Leu Pro Arg Glu Gln Asp Leu Gly Leu  
 100 105 110

Gly Gln Val Glu Lys Ile Pro Asp Phe Phe Ser Thr Val Phe Val Leu  
 115 120 125

Met Val Tyr Phe Tyr Trp Leu Leu Tyr Cys Leu Gly Gln Val Val Val  
 130 135 140

Ala Phe Tyr Leu Leu  
 145

<210> 203  
 <211> 121  
 <212> PRT  
 <213> Homo sapien

256

&lt;400&gt; 203

Met Val Arg Ile Leu Ala Asn Gly Glu Ile Val Gln Asp Asp Asp Pro  
 1 5 10 15

Arg Val Arg Thr Thr Thr Gln Pro Pro Arg Gly Ser Ile Pro Arg Gln  
 20 25 30

Ser Phe Phe Asn Arg Gly His Gly Ala Pro Pro Gly Gly Pro Gly Pro  
 35 40 45

Arg Gln Gln Gln Ala Gly Ala Arg Leu Gly Ala Ala Gln Ser Pro Phe  
 50 55 60

Asn Asp Leu Asn Arg Gln Leu Val Asn Met Gly Phe Pro Gln Trp His  
 65 70 75 80

Leu Gly Asn His Ala Val Glu Pro Val Thr Ser Ile Leu Leu Leu Phe  
 85 90 95

Leu Leu Met Met Leu Gly Val Arg Gly Leu Leu Leu Val Gly Leu Val  
 100 105 110

Tyr Leu Val Ser His Leu Ser Gln Arg  
 115 120

&lt;210&gt; 204

&lt;211&gt; 149

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 204

Glu Gln Ala Tyr Leu Glu Gly Ile Trp Trp Cys Leu Glu Gly Met Ile  
 1 5 10 15

Arg Glu Gly Thr Thr Gly Val Cys Phe Pro Phe Val Leu Ser Val Arg  
 20 25 30

Gln Arg Glu Thr Leu Val Gln His Phe Gln Ser Val Gly Gly Ser Val  
 35 40 45

Gly Ser Arg Asp Thr Phe Arg Trp Tyr Gly Ala Cys Ile Lys Trp His  
 50 55 60

Lys Ile Arg Ala Arg Lys Arg Cys Pro Ser Gln Phe Ser Gln Ser Phe  
 65 70 75 80

257

Tyr Ala Glu Lys Ile Ser Ala Gly Cys Gln His Val Pro Met Pro Val  
85 90 95

Glu Asp Met Pro Thr Ser Pro Leu Pro Arg Glu Gln Asp Leu Gly Leu  
100 105 110

Gly Gln Val Glu Lys Ile Pro Asp Phe Phe Ser Thr Val Phe Val Leu  
115 120 125

Met Val Tyr Phe Tyr Trp Leu Leu Tyr Cys Leu Gly Gln Val Val Val  
130 135 140

Ala Phe Tyr Leu Leu  
145

<210> 205

<211> 101

<212> PRT

<213> Homo sapien

<400> 205

Met Ile His Ser Ser Leu Ser Val Phe Thr Phe Gln Ser Phe Phe Asn  
1 5 10 15

Arg Gly His Gly Ala Pro Pro Gly Gly Pro Gly Pro Arg Gln Gln Gln  
20 25 30

Ala Gly Ala Arg Leu Gly Ala Ala Gln Ser Pro Phe Asn Asp Leu Asn  
35 40 45

Arg Gln Leu Val Asn Met Gly Phe Pro Gln Trp His Leu Gly Asn His  
50 55 60

Ala Val Glu Pro Val Thr Ser Ile Leu Leu Leu Phe Leu Leu Met Met  
65 70 75 80

Leu Gly Val Arg Gly Leu Leu Leu Val Gly Leu Val Tyr Leu Val Ser  
85 90 95

His Leu Ser Gln Arg  
100

<210> 206

<211> 95

<212> PRT

<213> Homo sapien

<400> 206

258

Trp Ile Ala Arg Ala Gly Thr Gln Leu Gln Asn Phe Thr Leu Asp Arg  
1 5 10 15

Ser Ser Val Leu Val Asp Gly Tyr Ser Pro Asn Arg Asn Glu Pro Leu  
20 25 30

Thr Gly Asn Ser Asp Leu Pro Phe Trp Ala Val Ile Leu Ile Gly Leu  
35 40 45

Ala Gly Leu Leu Gly Leu Ile Thr Cys Leu Ile Cys Gly Val Leu Val  
50 55 60

Thr Thr Arg Arg Arg Lys Lys Glu Gly Glu Tyr Asn Val Gln Gln Gln  
65 70 75 80

Cys Pro Gly Tyr Tyr Gln Ser His Leu Asp Leu Glu Asp Leu Gln  
85 90 95

<210> 207

<211> 109

<212> PRT

<213> Homo sapien

<400> 207

Met His Ala Arg Ala Ala Gln Cys Asp Gly Ser Val Val Ala Ala Asp  
1 5 10 15

Pro Gly Asp Gly Thr Gln Leu Gln Asn Phe Thr Leu Asp Arg Ser Ser  
20 25 30

Val Leu Val Asp Gly Tyr Ser Pro Asn Arg Asn Glu Pro Leu Thr Gly  
35 40 45

Asn Ser Asp Leu Pro Phe Trp Ala Val Ile Leu Ile Gly Leu Ala Gly  
50 55 60

Leu Leu Gly Leu Ile Thr Cys Leu Ile Cys Gly Val Leu Val Thr Thr  
65 70 75 80

Arg Arg Arg Lys Lys Glu Gly Glu Tyr Asn Val Gln Gln Gln Cys Pro  
85 90 95

Gly Tyr Tyr Gln Ser His Leu Asp Leu Glu Asp Leu Gln  
100 105

<210> 208

259

&lt;211&gt; 1485

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 208

Met Gln His Pro Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu  
 1 5 10 15

Gln Gly Leu Leu Lys Pro Leu Phe Lys Ser Thr Ser Val Gly Pro Leu  
 20 25 30

Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu Lys His Gly Ala  
 35 40 45

Ala Thr Gly Val Asp Ala Ile Cys Thr Leu Arg Leu Asp Pro Thr Gly  
 50 55 60

Pro Gly Leu Asp Arg Glu Arg Leu Tyr Trp Glu Leu Ser Gln Leu Thr  
 65 70 75 80

Asn Ser Val Thr Glu Leu Gly Pro Tyr Thr Leu Asp Arg Asp Ser Leu  
 85 90 95

Tyr Val Asn Gly Phe Thr His Arg Ser Ser Val Pro Thr Thr Ser Ile  
 100 105 110

Pro Gly Thr Ser Ala Val His Leu Glu Thr Ser Gly Thr Pro Ala Ser  
 115 120 125

Leu Pro Gly His Thr Ala Pro Gly Pro Leu Leu Val Pro Phe Thr Leu  
 130 135 140

Asn Phe Thr Ile Thr Asn Leu Gln Tyr Glu Glu Asp Met Arg His Pro  
 145 150 155 160

Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu  
 165 170 175

Lys Pro Leu Phe Lys Ser Thr Ser Val Gly Pro Leu Tyr Ser Gly Cys  
 180 185 190

Arg Leu Thr Leu Leu Arg Pro Glu Lys Arg Gly Ala Ala Thr Gly Val  
 195 200 205

Asp Thr Ile Cys Thr His Arg Leu Asp Pro Leu Asn Pro Gly Leu Asp  
 210 215 220

260

Arg Glu Gln Leu Tyr Trp Glu Leu Ser Lys Leu Thr Arg Gly Ile Ile  
 225 230 235 240

Glu Leu Gly Pro Tyr Leu Leu Asp Arg Gly Ser Leu Tyr Val Asn Gly  
 245 250 255

Phe Thr His Arg Asn Phe Val Pro Ile Thr Ser Thr Pro Gly Thr Ser  
 260 265 270

Thr Val His Leu Gly Thr Ser Glu Thr Pro Ser Ser Leu Pro Arg Pro  
 275 280 285

Ile Val Pro Gly Pro Leu Leu Val Pro Phe Thr Leu Asn Phe Thr Ile  
 290 295 300

Thr Asn Leu Gln Tyr Glu Glu Ala Met Arg His Pro Gly Ser Arg Lys  
 305 310 315 320

Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu Arg Pro Leu Phe  
 325 330 335

Lys Asn Thr Ser Ile Gly Pro Leu Tyr Ser Ser Cys Arg Leu Thr Leu  
 340 345 350

Leu Arg Pro Glu Lys Asp Lys Ala Ala Thr Arg Val Asp Ala Ile Cys  
 355 360 365

Thr His His Pro Asp Pro Gln Ser Pro Gly Leu Asn Arg Glu Gln Leu  
 370 375 380

Tyr Trp Glu Leu Ser Gln Leu Thr His Gly Ile Thr Glu Leu Gly Pro  
 385 390 395 400

Tyr Thr Leu Asp Arg Asp Ser Leu Tyr Val Asp Gly Phe Thr His Trp  
 405 410 415

Ser Pro Ile Pro Thr Thr Ser Thr Pro Gly Thr Ser Ile Val Asn Leu  
 420 425 430

Gly Thr Ser Gly Ile Pro Pro Ser Leu Pro Glu Thr Thr Ala Thr Gly  
 435 440 445

Pro Leu Leu Val Pro Phe Thr Leu Asn Phe Thr Ile Thr Asn Leu Gln  
 450 455 460



261

Tyr Glu Glu Asn Met Gly His Pro Gly Ser Arg Lys Phe Asn Ile Thr  
 465 470 475 480

Glu Ser Val Leu Gln Gly Leu Leu Lys Pro Leu Phe Lys Ser Thr Ser  
 485 490 495

Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu  
 500 505 510

Lys Asp Gly Val Ala Thr Arg Val Asp Ala Ile Cys Thr His Arg Pro  
 515 520 525

Asp Pro Lys Ile Pro Gly Leu Asp Arg Gln Gln Leu Tyr Trp Glu Leu  
 530 535 540

Ser Gln Leu Thr His Ser Ile Thr Glu Leu Gly Pro Tyr Thr Leu Asp  
 545 550 555 560

Arg Asp Ser Leu Tyr Val Asn Gly Phe Thr Gln Arg Ser Ser Val Pro  
 565 570 575

Thr Thr Ser Thr Pro Gly Thr Phe Thr Val Gln Pro Glu Thr Ser Glu  
 580 585 590

Thr Pro Ser Ser Leu Pro Gly Pro Thr Ala Thr Gly Pro Val Leu Leu  
 595 600 605

Pro Phe Thr Leu Asn Phe Thr Ile Ile Asn Leu Gln Tyr Glu Glu Asp  
 610 615 620

Met His Arg Pro Gly Ser Arg Lys Phe Asn Thr Thr Glu Arg Val Leu  
 625 630 635 640

Gln Gly Leu Leu Met Pro Leu Phe Lys Asn Thr Ser Val Ser Ser Leu  
 645 650 655

Tyr Ser Gly Cys Arg Leu Thr Leu Leu Arg Pro Glu Lys Asp Gly Ala  
 660 665 670

Ala Thr Arg Val Asp Ala Val Cys Thr His Arg Pro Asp Pro Lys Ser  
 675 680 685

Pro Gly Leu Asp Arg Glu Arg Leu Tyr Trp Lys Leu Ser Gln Leu Thr  
 690 695 700

His Gly Ile Thr Glu Leu Gly Pro Tyr Thr Leu Asp Arg His Ser Leu

262

705					710						715					720
Tyr	Val	Asn	Gly	Phe	Thr	His	Gln	Ser	Ser	Met	Thr	Thr	Thr	Arg	Thr	
				725					730					735		
Pro	Asp	Thr	Ser	Thr	Met	His	Leu	Ala	Thr	Ser	Arg	Thr	Pro	Ala	Ser	
			740					745					750			
Leu	Ser	Gly	Pro	Thr	Thr	Ala	Ser	Pro	Leu	Leu	Val	Leu	Phe	Thr	Ile	
		755					760					765				
Asn	Phe	Thr	Ile	Thr	Asn	Leu	Arg	Tyr	Glu	Glu	Asn	Met	His	His	Pro	
	770					775					780					
Gly	Ser	Arg	Lys	Phe	Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	
785					790					795					800	
Arg	Pro	Val	Phe	Lys	Asn	Thr	Ser	Val	Gly	Pro	Leu	Tyr	Ser	Gly	Cys	
				805					810					815		
Arg	Leu	Thr	Leu	Leu	Arg	Pro	Lys	Lys	Asp	Gly	Ala	Ala	Thr	Lys	Val	
			820					825					830			
Asp	Ala	Ile	Cys	Thr	Tyr	Arg	Pro	Asp	Pro	Lys	Ser	Pro	Gly	Leu	Asp	
		835					840					845				
Arg	Glu	Gln	Leu	Tyr	Trp	Glu	Leu	Ser	Gln	Leu	Thr	His	Ser	Ile	Thr	
	850					855					860					
Glu	Leu	Gly	Pro	Tyr	Thr	Leu	Asp	Arg	Asp	Ser	Leu	Tyr	Val	Asn	Gly	
865					870					875					880	
Phe	Thr	Gln	Arg	Ser	Ser	Val	Pro	Thr	Thr	Ser	Ile	Pro	Gly	Thr	Pro	
				885					890					895		
Thr	Val	Asp	Leu	Gly	Thr	Ser	Gly	Thr	Pro	Val	Ser	Lys	Pro	Gly	Pro	
			900					905					910			
Ser	Ala	Ala	Ser	Pro	Leu	Leu	Val	Leu	Phe	Thr	Leu	Asn	Phe	Thr	Ile	
		915					920					925				
Thr	Asn	Leu	Arg	Tyr	Glu	Glu	Asn	Met	Gln	His	Pro	Gly	Ser	Arg	Lys	
	930					935					940					
Phe	Asn	Thr	Thr	Glu	Arg	Val	Leu	Gln	Gly	Leu	Leu	Arg	Ser	Leu	Phe	
945					950					955					960	

263

Lys Ser Thr Ser Val Gly Pro Leu Tyr Ser Gly Cys Arg Leu Thr Leu  
                                   965                                  970                                  975

Leu Arg Pro Glu Lys Asp Gly Thr Ala Thr Gly Val Asp Ala Ile Cys  
                                   980                                  985                                  990

Thr His His Pro Asp Pro Lys Ser Pro Arg Leu Asp Arg Glu Gln Leu  
                                   995                                  1000                                  1005

Tyr Trp Glu Leu Ser Gln Leu Thr His Asn Ile Thr Glu Leu Gly  
                                   1010                                  1015                                  1020

Pro Tyr Ala Leu Asp Asn Asp Ser Leu Phe Val Asn Gly Phe Thr  
                                   1025                                  1030                                  1035

His Arg Ser Ser Val Ser Thr Thr Ser Thr Pro Gly Thr Pro Thr  
                                   1040                                  1045                                  1050

Val Tyr Leu Gly Ala Ser Lys Thr Pro Ala Ser Ile Phe Gly Pro  
                                   1055                                  1060                                  1065

Ser Ala Ala Ser His Leu Leu Ile Leu Phe Thr Leu Asn Phe Thr  
                                   1070                                  1075                                  1080

Ile Thr Asn Leu Arg Tyr Glu Glu Asn Met Trp Pro Gly Ser Arg  
                                   1085                                  1090                                  1095

Lys Phe Asn Thr Thr Glu Arg Val Leu Gln Gly Leu Leu Arg Pro  
                                   1100                                  1105                                  1110

Leu Phe Lys Asn Thr Ser Val Gly Pro Leu Tyr Ser Gly Cys Arg  
                                   1115                                  1120                                  1125

Leu Thr Leu Leu Arg Pro Glu Lys Asp Gly Glu Ala Thr Gly Val  
                                   1130                                  1135                                  1140

Asp Ala Ile Cys Thr His Arg Pro Asp Pro Thr Gly Pro Gly Leu  
                                   1145                                  1150                                  1155

Asp Arg Glu Gln Leu Tyr Leu Glu Leu Ser Gln Leu Thr His Ser  
                                   1160                                  1165                                  1170

Ile Thr Glu Leu Gly Pro Tyr Thr Leu Asp Arg Asp Ser Leu Tyr  
                                   1175                                  1180                                  1185

264

Val	Asn	Gly	Phe	Thr	His	Arg	Ser	Ser	Val	Pro	Thr	Thr	Ser	Thr
1190						1195					1200			
Gly	Val	Val	Ser	Glu	Glu	Pro	Phe	Thr	Leu	Asn	Phe	Thr	Ile	Asn
1205						1210					1215			
Asn	Leu	Arg	Tyr	Met	Ala	Asp	Met	Gly	Gln	Pro	Gly	Ser	Leu	Lys
1220						1225					1230			
Phe	Asn	Ile	Thr	Asp	Asn	Val	Met	Lys	His	Leu	Leu	Ser	Pro	Leu
1235						1240					1245			
Phe	Gln	Arg	Ser	Ser	Leu	Gly	Ala	Arg	Tyr	Thr	Gly	Cys	Arg	Val
1250						1255					1260			
Ile	Ala	Leu	Arg	Ser	Val	Lys	Asn	Gly	Ala	Glu	Thr	Arg	Val	Asp
1265						1270					1275			
Leu	Leu	Cys	Thr	Tyr	Leu	Gln	Pro	Leu	Ser	Gly	Pro	Gly	Leu	Pro
1280						1285					1290			
Ile	Lys	Gln	Val	Phe	His	Glu	Leu	Ser	Gln	Gln	Thr	His	Gly	Ile
1295						1300					1305			
Thr	Arg	Leu	Gly	Pro	Tyr	Ser	Leu	Asp	Lys	Asp	Ser	Leu	Tyr	Leu
1310						1315					1320			
Asn	Gly	Tyr	Asn	Glu	Pro	Gly	Pro	Asp	Glu	Pro	Pro	Thr	Thr	Pro
1325						1330					1335			
Lys	Pro	Ala	Thr	Thr	Phe	Leu	Pro	Pro	Leu	Ser	Glu	Ala	Thr	Thr
1340						1345					1350			
Ala	Met	Gly	Tyr	His	Leu	Lys	Thr	Leu	Thr	Leu	Asn	Phe	Thr	Ile
1355						1360					1365			
Ser	Asn	Leu	Gln	Tyr	Ser	Pro	Asp	Met	Gly	Lys	Gly	Ser	Ala	Thr
1370						1375					1380			
Phe	Asn	Ser	Thr	Glu	Gly	Val	Leu	Gln	His	Leu	Leu	Arg	Pro	Leu
1385						1390					1395			
Phe	Gln	Lys	Ser	Ser	Met	Gly	Pro	Phe	Tyr	Leu	Gly	Cys	Gln	Leu
1400						1405					1410			

265

Ile Ser Leu Arg Pro Glu Lys Asp Gly Ala Ala Thr Gly Val Asp  
 1415 1420 1425

Thr Thr Cys Thr Tyr His Pro Asp Pro Val Gly Pro Gly Leu Asp  
 1430 1435 1440

Ile Gln Gln Leu Tyr Trp Glu Leu Ser Gln Leu Thr His Gly Val  
 1445 1450 1455

Thr Gln Leu Gly Phe Tyr Val Leu Asp Arg Asp Ser Leu Phe Ile  
 1460 1465 1470

Asn Gly His His Thr Leu Gln Arg Gln Ser Thr Thr  
 1475 1480 1485

<210> 209

<211> 111

<212> PRT

<213> Homo sapien

<220>

<221> MISC\_FEATURE

<222> (11)..(12)

<223> X=any amino acid

<400> 209

Lys Lys Arg Lys Glu Arg Lys Arg Glu Asn Xaa Xaa Thr Ile Gly Thr  
 1 5 10 15

Gly Ser Leu Met His Ala Arg Ala Ala Gln Cys Asp Gly Ser Pro Gly  
 20 25 30

Arg Cys Val Leu Val Asp Gly Tyr Ser Pro Asn Arg Asn Glu Pro Leu  
 35 40 45

Thr Gly Asn Ser Asp Leu Pro Phe Trp Ala Val Ile Leu Ile Gly Leu  
 50 55 60

Ala Gly Leu Leu Gly Leu Ile Thr Cys Leu Ile Cys Gly Val Leu Val  
 65 70 75 80

Thr Thr Arg Arg Arg Lys Lys Glu Gly Glu Tyr Asn Val Gln Gln Gln  
 85 90 95

Cys Pro Gly Tyr Tyr Gln Ser His Leu Asp Leu Glu Asp Leu Gln  
 100 105 110

266

<210> 210  
 <211> 87  
 <212> PRT  
 <213> Homo sapien

<400> 210

Met Arg Gly Arg Gly Arg Pro Gly Arg Cys Val Leu Val Asp Gly Tyr  
 1 5 10 15

Ser Pro Asn Arg Asn Glu Pro Leu Thr Gly Asn Ser Asp Leu Pro Phe  
 20 25 30

Trp Ala Val Ile Leu Ile Gly Leu Ala Gly Leu Leu Gly Leu Ile Thr  
 35 40 45

Cys Leu Ile Cys Gly Val Leu Val Thr Thr Arg Arg Arg Lys Lys Glu  
 50 55 60

Gly Glu Tyr Asn Val Gln Gln Gln Cys Pro Gly Tyr Tyr Gln Ser His  
 65 70 75 80

Leu Asp Leu Glu Asp Leu Gln  
 85

<210> 211  
 <211> 92  
 <212> PRT  
 <213> Homo sapien

<400> 211

Pro Ser Leu Leu Gly Cys His Pro His Arg Leu Gly Arg Thr Pro Gly  
 1 5 10 15

Thr His His Met Pro Asp Leu Arg Cys Pro Gly Asp His Pro Pro Ala  
 20 25 30

Glu Glu Gly Arg Arg Ile Gln Arg Pro Ala Thr Val Pro Arg Leu Leu  
 35 40 45

Pro Val Thr Pro Arg Pro Gly Gly Ser Ala Met Thr Gly Thr Cys Arg  
 50 55 60

Cys Leu Gly Cys Leu Ser Pro Ser Gln Gly Pro Lys Lys Leu Gly Trp  
 65 70 75 80

Gly Arg Asn Lys Pro Tyr Trp Ser Val Lys Lys Leu  
 85 90

267

<210> 212  
 <211> 83  
 <212> PRT  
 <213> Homo sapien

<400> 212

Met His Pro Pro Gly Phe Leu Ser Phe Leu Gly Tyr Ser Pro Asn Arg  
 1 5 10 15

Asn Glu Pro Leu Thr Gly Asn Ser Asp Leu Pro Phe Trp Ala Val Ile  
 20 25 30

Leu Ile Gly Leu Ala Gly Leu Leu Gly Leu Ile Thr Cys Leu Ile Cys  
 35 40 45

Gly Val Leu Val Thr Thr Arg Arg Arg Lys Lys Glu Gly Glu Tyr Asn  
 50 55 60

Val Gln Gln Gln Cys Pro Gly Tyr Tyr Gln Ser His Leu Asp Leu Glu  
 65 70 75 80

Asp Leu Gln

<210> 213  
 <211> 225  
 <212> PRT  
 <213> Homo sapien

<400> 213

Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
 1 5 10 15

Leu Gly Asp Leu Gln Ala Ala Pro Glu Ala Gln Val Ser Val Gln Pro  
 20 25 30

Asn Phe Gln Gln Asp Lys Phe Leu Gly Arg Trp Phe Ser Ala Gly Leu  
 35 40 45

Ala Ser Asn Ser Ser Trp Leu Arg Glu Lys Lys Ala Ala Leu Ser Met  
 50 55 60

Cys Lys Ser Val Val Ala Pro Ala Thr Asp Gly Gly Leu Asn Leu Thr  
 65 70 75 80

Ser Thr Phe Leu Arg Lys Asn Gln Cys Glu Thr Arg Thr Met Leu Leu  
 85 90 95

268

Gln Pro Ala Gly Ser Leu Gly Ser Tyr Ser Tyr Arg Ser Pro Arg Glu  
 100 105 110

Trp Gly Leu His Arg Pro Pro Gly Pro Ser Leu Gly Ala Thr Leu Ala  
 115 120 125

Gly Thr Thr Leu Gly Gln Pro Pro Ala Ala Glu Ile His Gly Val Gly  
 130 135 140

Gly Asp Trp Gly Ser Thr Tyr Ser Val Ser Val Val Glu Thr Asp Tyr  
 145 150 155 160

Asp Gln Tyr Ala Leu Leu Tyr Ser Gln Gly Ser Lys Gly Pro Gly Glu  
 165 170 175

Asp Phe Arg Met Ala Thr Leu Tyr Ser Arg Thr Gln Thr Pro Arg Ala  
 180 185 190

Glu Leu Lys Glu Lys Phe Thr Ala Phe Cys Lys Ala Gln Gly Phe Thr  
 195 200 205

Glu Asp Thr Ile Val Phe Leu Pro Gln Thr Asp Lys Cys Met Thr Glu  
 210 215 220

Gln  
 225

<210> 214  
 <211> 349  
 <212> PRT  
 <213> Homo sapien

<400> 214

Arg Arg His Ser Ser Arg Ser Ser Cys Ser Gly Pro Pro Arg Pro Gly  
 1 5 10 15

His Leu Pro Arg Ser Pro Thr Pro Leu Ala Pro Gly Pro Gly His Pro  
 20 25 30

Leu Cys Cys Arg Arg Met Ala Thr His His Thr Leu Trp Met Gly Leu  
 35 40 45

Ala Leu Leu Gly Val Leu Gly Asp Leu Gln Ala Ala Pro Glu Ala Gln  
 50 55 60



269

Val 65	Ser	Val	Gln	Pro	Asn 70	Phe	Gln	Gln	Asp	Lys 75	Val	Arg	Gly	Phe	Pro 80
Ala	Ser	Ser	Pro	Arg 85	Ala	Thr	Gly	Pro	Cys 90	Gln	Gly	Lys	Gly	Thr	Phe 95
Arg	Leu	Gly	Leu 100	Pro	Pro	Gly	Arg	Ser 105	Glu	Arg	Ser	Pro	Ala	Val	Pro 110
Gly	Ser	Ala 115	Gly	Gln	Gly	Leu	Ser 120	Gly	Arg	Ala	Gly	Arg 125	Arg	Leu	Gly
Ser 130	Arg	Pro	Arg	Arg	Leu	Pro 135	Ala	Arg	Ser	Pro	Pro	Trp	Ala	Pro	Arg 140
Pro 145	Val	Ser	Pro	Asp	Gly 150	Pro	Arg	Arg	His	Arg	Ala	Thr	His	Ala	Pro 160
Thr	Pro	Ala	Arg	His 165	Val	His	Pro	Cys	Gly 170	His	Ala	Thr	Pro	Arg	Gly 175
His	Thr	Ser	Ala 180	Arg	Ser	Thr	Pro	Gly 185	Cys	Gln	Asp	Thr	Gly 190	Gly	Trp
Gly	Thr	Gly 195	Met	Ala	Thr	Asn	Thr 200	Pro	Cys	Ala	Val	Gly 205	Val	Gly	Arg
Asp 210	Ala	His	Arg	Thr	Asp	Ser 215	Arg	Arg	Arg	Ala	Leu	Ser	Pro	Gly	Ser 220
Cys 225	Ser	Gly	Lys	Arg	Arg 230	Ser	Ala	Gly	Pro	Arg 235	Ala	Ala	Arg	Pro	Ser 240
Leu	Ala	Ser	Arg	Arg 245	Thr	Pro	Ala	Val	Arg 250	Arg	Ala	Glu	Pro	Lys 255	Thr
Arg	Pro	Asp	Pro 260	Arg	Gln	Glu	Cys	Asp 265	Val	Leu	Cys	Arg	Pro 270	Leu	Tyr
Gly	Pro	Gly 275	Ala	Gln	Pro	Gly	His 280	Arg	Ile	Gly	Thr	Gly 285	Gly	Gly	Gly
Ala 290	Glu	Ala	Gly	Trp	Trp	Ala	Ala	Cys	Glu	Val	Pro	Gly	Ala	Leu	Val 300
Gln	Arg	Gly	Pro	Arg	Leu	Gln	Leu	Glu	Leu	Ala	Pro	Gly	Glu	Glu	Gly

270															
305	310										315			320	
Gly	Val	Val	His	Val	Gln	Val	Cys	Gly	Gly	Pro	Cys	His	Gly	Trp	Trp
				325					330					335	
Pro	Gln	Pro	Asp	Leu	His	Leu	Pro	Gln	Glu	Lys	Pro	Val			
			340					345							
<210>	215														
<211>	413														
<212>	PRT														
<213>	Homo sapien														
<400>	215														
Met	Ala	Thr	His	His	Thr	Leu	Trp	Met	Gly	Leu	Ala	Leu	Leu	Gly	Val
1				5					10					15	
Leu	Gly	Asp	Leu	Gln	Ala	Ala	Pro	Glu	Ala	Gln	Val	Ser	Val	Gln	Pro
			20					25					30		
Asn	Phe	Gln	Gln	Asp	Lys	Val	Arg	Gly	Phe	Pro	Ala	Ser	Ser	Pro	Arg
		35					40					45			
Ala	Thr	Gly	Pro	Cys	Gln	Gly	Lys	Gly	Thr	Phe	Arg	Leu	Gly	Leu	Pro
	50					55					60				
Pro	Gly	Arg	Ser	Glu	Arg	Ser	Pro	Ala	Val	Pro	Gly	Ser	Ala	Gly	Gln
65					70					75					80
Gly	Leu	Ser	Gly	Arg	Ala	Gly	Arg	Arg	Leu	Gly	Ser	Arg	Pro	Arg	Arg
				85					90					95	
Leu	Pro	Ala	Arg	Ala	Leu	Pro	Gly	His	Arg	Val	Pro	Ser	Pro	Leu	Met
			100					105					110		
Gly	His	Ala	Asp	Thr	Gly	Pro	His	Thr	Arg	Pro	Arg	Gln	Pro	Asp	Thr
		115					120					125			
Ser	Thr	Pro	Val	Gly	Thr	Arg	Pro	Pro	Glu	Asp	Thr	Arg	Ala	His	Val
	130					135					140				
Pro	His	Leu	Gly	Ala	Arg	Thr	Arg	Ala	Gly	Gly	Ala	Gln	Gly	Trp	Arg
145					150					155					160
Gln	Thr	Leu	Arg	Ala	Arg	Trp	Gly	Leu	Gly	Gly	Thr	Arg	Thr	Ala	Gln
				165					170					175	

271

Thr Ala Gly Asp Ala Arg Ser Arg Pro Gly Ala Ala Arg Gly Ser Ala  
 180 185 190

Gly Ala Arg Val Pro Ala Pro Arg Ala Pro Pro Trp Arg Arg Gly Glu  
 195 200 205

Pro Gln Arg Ser Ala Glu Leu Ser Arg Arg Pro Ala Pro Ile Pro Ala  
 210 215 220

Arg Asn Ala Thr Ser Ser Ala Ala Arg Cys Met Gly Gln Ala Leu Ser  
 225 230 235 240

Gln Gly Thr Glu Ser Gly Pro Gly Ala Glu Gly Pro Lys Leu Ala Gly  
 245 250 255

Gly Arg Arg Ala Arg Phe Leu Gly Arg Trp Phe Ser Ala Gly Leu Ala  
 260 265 270

Ser Asn Ser Ser Trp Leu Arg Glu Lys Lys Ala Ala Leu Ser Met Cys  
 275 280 285

Lys Ser Val Val Ala Pro Ala Thr Asp Gly Gly Leu Asn Leu Thr Ser  
 290 295 300

Thr Phe Leu Arg Lys Asn Gln Cys Glu Thr Arg Thr Met Leu Leu Gln  
 305 310 315 320

Pro Ala Gly Ser Leu Gly Ser Tyr Ser Tyr Arg Ser Pro His Trp Gly  
 325 330 335

Ser Thr Tyr Ser Val Ser Val Val Glu Thr Asp Tyr Asp Gln Tyr Ala  
 340 345 350

Leu Leu Tyr Ser Gln Gly Ser Lys Gly Pro Gly Glu Asp Phe Arg Met  
 355 360 365

Ala Thr Leu Tyr Ser Arg Thr Gln Thr Pro Arg Ala Glu Leu Lys Glu  
 370 375 380

Lys Phe Thr Ala Phe Cys Lys Ala Gln Gly Phe Thr Glu Asp Thr Ile  
 385 390 395 400

Val Phe Leu Pro Gln Thr Asp Lys Cys Met Thr Glu Gln  
 405 410

272

<210> 216  
 <211> 410  
 <212> PRT  
 <213> Homo sapien

<400> 216

Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
 1 5 10 15

Leu Gly Asp Leu Gln Ala Ala Pro Glu Ala Gln Val Ser Val Gln Pro  
 20 25 30

Asn Phe Gln Gln Asp Lys Val Arg Gly Phe Pro Ala Ser Ser Pro Arg  
 35 40 45

Ala Thr Gly Pro Cys Gln Gly Lys Gly Thr Phe Arg Leu Gly Leu Pro  
 50 55 60

Pro Gly Arg Ser Glu Arg Ser Pro Ala Val Pro Gly Ser Ala Gly Gln  
 65 70 75 80

Gly Leu Ser Gly Arg Ala Gly Arg Arg Leu Gly Ser Arg Pro Arg Arg  
 85 90 95

Leu Pro Ala Arg Ser Pro Pro Trp Ala Pro Arg Pro Val Ser Pro Asp  
 100 105 110

Gly Pro Arg Arg His Arg Ala Thr His Ala Pro Thr Pro Ala Arg His  
 115 120 125

Val His Pro Cys Gly His Ala Thr Pro Arg Gly His Thr Ser Ala Arg  
 130 135 140

Ser Thr Pro Gly Cys Gln Asp Thr Gly Gly Trp Gly Thr Gly Met Ala  
 145 150 155 160

Thr Asn Thr Pro Cys Ala Val Gly Val Gly Arg Asp Ala His Arg Thr  
 165 170 175

Asp Ser Arg Arg Arg Ala Leu Ser Pro Gly Ser Cys Ser Gly Lys Arg  
 180 185 190

Arg Ser Ala Gly Pro Arg Ala Ala Arg Pro Ser Leu Ala Ser Arg Arg  
 195 200 205

Thr Pro Ala Val Arg Arg Ala Glu Pro Lys Thr Arg Pro Asp Pro Arg  
 210 215 220

273

Gln Glu Cys Asp Val Leu Cys Arg Pro Leu Tyr Gly Pro Gly Ala Gln  
 225 230 235 240

Pro Gly His Arg Ile Gly Thr Gly Gly Gly Gly Ala Glu Ala Gly Trp  
 245 250 255

Trp Ala Ala Cys Glu Gly Glu Gly Leu Ser Ser Gly Gly Ala Trp Pro  
 260 265 270

Asp Gly Gly Ala Gly Cys Gln Gly Arg Gly Gln Leu Leu Gly Arg Arg  
 275 280 285

Cys Glu Gly Arg Gly His Leu Leu Gly Arg Gly Leu Arg Gly Gly Gly  
 290 295 300

Gln Phe Leu Gly Arg Gly Val Arg Gly Val Ala Ala Arg Gly Ile Gly  
 305 310 315 320

Arg Gly Gly Gly Ala Gly Leu Glu Thr Gly Gly Val Asp Gly Arg Gly  
 325 330 335

Ala Pro Ala Gly Arg Arg Arg Trp Val Arg Arg Val Leu Ala Asp Ala  
 340 345 350

Gly Gly Gly Arg Ser Pro Gln Phe Pro Gly Ala Leu Val Gln Arg Gly  
 355 360 365

Pro Arg Leu Gln Leu Glu Leu Ala Pro Gly Glu Glu Gly Gly Val Val  
 370 375 380

His Val Gln Val Cys Gly Gly Pro Cys His Gly Trp Trp Pro Gln Pro  
 385 390 395 400

Asp Leu His Leu Pro Gln Glu Lys Pro Val  
 405 410

<210> 217

<211> 135

<212> PRT

<213> Homo sapien

<400> 217

Met Ala Ala Gly Pro Met Ala Ala Glu Pro Cys Gly Pro His Ala Leu  
 1 5 10 15

274

Val Ala Leu Ala Gly Leu Val Thr Gly Ile Pro Thr His His Pro Arg  
 20 25 30

Val Tyr Asn Ile His Ser Arg Thr Val Thr Arg Tyr Pro Ala Asn Ser  
 35 40 45

Ile Val Val Val Gly Gly Cys Pro Val Cys Arg Val Gly Val Leu Glu  
 50 55 60

Asp Cys Phe Thr Phe Leu Gly Ile Phe Leu Ala Ile Ile Leu Phe Arg  
 65 70 75 80

Ile Gly Pro Ala Ala Ile Gly Gln Trp Gln Pro Pro Asn Gly Ser Arg  
 85 90 95

Thr Gln Thr Pro Arg Ala Glu Leu Lys Glu Lys Phe Thr Ala Phe Cys  
 100 105 110

Lys Ala Gln Gly Phe Thr Glu Asp Thr Ile Val Phe Leu Pro Gln Thr  
 115 120 125

Asp Lys Cys Met Thr Glu Gln  
 130 135

<210> 218  
 <211> 150  
 <212> PRT  
 <213> Homo sapien

<400> 218

Ala Leu Leu Glu Ala Trp Ala Arg Asp Arg Gly Val Ser Val Gln Val  
 1 5 10 15

Arg Thr Ser Leu Pro Gln Pro Leu His Glu Glu Pro Pro Pro Trp Gly  
 20 25 30

Thr Trp Arg Pro Gly Ala His Ser Val Pro Gly Pro Ser Ser Ser Gln  
 35 40 45

Asp Val Gly Leu Gln Pro Gly Gly Gly His Arg Val Glu Gly Ala His  
 50 55 60

Gly Gly Tyr Arg Gly Thr Asn His Thr Gly Leu Arg His Ser Leu Leu  
 65 70 75 80

Gly Val Asp Ser Leu Leu Leu Ala Glu Val Glu Lys Asp Pro Leu Phe  
 85 90 95

275

Val Ser Ser Ala Gln Gly Glu Val Gly Gly Asp Gly Gly Ser Val Gln  
 100 105 110

Phe Gly Gly Ser Val Lys Thr Ser Ser Ala Leu Arg Glu Glu Gln Glu  
 115 120 125

Ala Gln Trp Glu Asn Trp Pro Lys Ser Gly Val Leu Thr Thr Ala Pro  
 130 135 140

Gly Phe Phe Leu Gly Arg  
 145 150

<210> 219

<211> 224

<212> PRT

<213> Homo sapien

<400> 219

Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
 1 5 10 15

Leu Gly Asp Leu Gln Ala Ala Pro Glu Ala Gln Val Ser Val Gln Pro  
 20 25 30

Asn Phe Gln Gln Asp Lys Phe Leu Gly Arg Trp Phe Ser Ala Gly Leu  
 35 40 45

Ala Ser Asn Ser Ser Trp Leu Arg Glu Lys Lys Ala Ala Leu Ser Met  
 50 55 60

Cys Lys Ser Val Val Ala Pro Ala Thr Asp Gly Gly Leu Asn Leu Thr  
 65 70 75 80

Ser Thr Phe Leu Arg Lys Asn Gln Cys Glu Thr Arg Thr Met Leu Leu  
 85 90 95

Gln Pro Ala Gly Ser Leu Gly Ser Tyr Ser Tyr Arg Ser Pro Arg Glu  
 100 105 110

Trp Gly Leu His Arg Pro Pro Gly Pro Ser Leu Gly Ala Thr Leu Ala  
 115 120 125

Gly Thr Thr Leu Gly Gln Pro Pro Ala Ala Glu Ile His Gly Val Gly  
 130 135 140

276

Asp Trp Gly Ser Thr Tyr Ser Val Ser Val Val Glu Thr Asp Tyr Asp  
 145 150 155 160

Gln Tyr Ala Leu Leu Tyr Ser Gln Gly Ser Lys Gly Pro Gly Glu Asp  
 165 170 175

Phe Arg Met Ala Thr Leu Tyr Ser Arg Thr Gln Thr Pro Arg Ala Glu  
 180 185 190

Leu Lys Glu Lys Phe Thr Ala Phe Cys Lys Ala Gln Gly Phe Thr Glu  
 195 200 205

Asp Thr Ile Val Phe Leu Pro Gln Thr Asp Lys Cys Met Thr Glu Gln  
 210 215 220

<210> 220

<211> 481

<212> PRT

<213> Homo sapien

<400> 220

Met Ala Thr His His Thr Leu Trp Met Gly Leu Ala Leu Leu Gly Val  
 1 5 10 15

Leu Gly Asp Leu Gln Ala Ala Pro Glu Ala Gln Val Ser Val Gln Pro  
 20 25 30

Asn Phe Gln Gln Asp Lys Val Arg Gly Phe Pro Ala Ser Ser Pro Arg  
 35 40 45

Ala Thr Gly Pro Cys Gln Gly Lys Gly Thr Phe Arg Leu Gly Leu Pro  
 50 55 60

Pro Gly Arg Ser Glu Arg Ser Pro Ala Val Pro Gly Ser Ala Gly Gln  
 65 70 75 80

Gly Leu Ser Gly Arg Ala Gly Arg Arg Leu Gly Ser Arg Pro Arg Arg  
 85 90 95

Leu Pro Ala Arg Ser Pro Pro Trp Ala Pro Arg Pro Val Ser Pro Asp  
 100 105 110

Gly Pro Arg Arg His Arg Ala Thr His Ala Pro Thr Pro Ala Arg His  
 115 120 125

Val His Pro Cys Gly His Ala Thr Pro Arg Gly His Thr Ser Ala Arg  
 130 135 140



277

Ser	Thr	Pro	Gly	Cys	Gln	Asp	Thr	Gly	Gly	Trp	Gly	Thr	Gly	Met	Ala	145	150	155	160
Thr	Asn	Thr	Pro	Cys	Ala	Val	Gly	Val	Gly	Arg	Asp	Ala	His	Arg	Thr	165	170	175	
Asp	Ser	Arg	Arg	Arg	Ala	Leu	Ser	Pro	Gly	Ser	Cys	Ser	Gly	Lys	Arg	180	185	190	
Arg	Ser	Ala	Gly	Pro	Arg	Ala	Ala	Arg	Pro	Ser	Leu	Ala	Ser	Arg	Arg	195	200	205	
Thr	Pro	Ala	Val	Arg	Arg	Ala	Glu	Pro	Lys	Thr	Arg	Pro	Asp	Pro	Arg	210	215	220	
Gln	Glu	Cys	Asp	Val	Leu	Cys	Arg	Pro	Leu	Tyr	Gly	Pro	Gly	Ala	Gln	225	230	235	240
Pro	Gly	His	Arg	Ile	Gly	Thr	Gly	Gly	Gly	Gly	Ala	Glu	Ala	Gly	Trp	245	250	255	
Trp	Ala	Ala	Cys	Glu	Gly	Glu	Gly	Leu	Ser	Ser	Gly	Gly	Ala	Trp	Pro	260	265	270	
Asp	Gly	Gly	Ala	Gly	Cys	Gln	Gly	Arg	Gly	Gln	Leu	Leu	Gly	Arg	Arg	275	280	285	
Cys	Glu	Gly	Arg	Gly	His	Leu	Leu	Gly	Arg	Gly	Leu	Arg	Gly	Gly	Gly	290	295	300	
Gln	Phe	Leu	Gly	Arg	Gly	Val	Arg	Gly	Val	Ala	Ala	Arg	Gly	Ile	Gly	305	310	315	320
Arg	Gly	Gly	Gly	Ala	Gly	Leu	Glu	Thr	Gly	Gly	Val	Asp	Gly	Arg	Gly	325	330	335	
Ala	Pro	Ala	Gly	Arg	Arg	Arg	Trp	Val	Arg	Arg	Val	Leu	Ala	Asp	Ala	340	345	350	
Gly	Gly	Gly	Arg	Ser	Pro	Gln	Phe	Leu	Gly	Arg	Trp	Phe	Ser	Ala	Gly	355	360	365	
Leu	Ala	Ser	Asn	Ser	Ser	Trp	Leu	Arg	Glu	Lys	Lys	Ala	Ala	Leu	Ser	370	375	380	

278

Met Cys Lys Ser Val Val Ala Pro Ala Thr Asp Gly Gly Leu Asn Leu  
385 390 395 400

Thr Ser Thr Phe Leu Arg Lys Asn Gln Cys Glu Thr Arg Thr Met Leu  
405 410 415

Leu Gln Pro Ala Gly Ser Leu Gly Ser Tyr Ser Tyr Arg Ser Pro Arg  
420 425 430

Glu Trp Gly Leu His Arg Pro Pro Gly Pro Ser Leu Gly Ala Thr Leu  
435 440 445

Ala Gly Thr Thr Leu Gly Gln Pro Pro Ala Ala Glu Ile His Gly Val  
450 455 460

Gly Gly Asp Gly Cys Pro Thr Ser Val Arg Gly Lys Gly Gln Ala Trp  
465 470 475 480

Ala

<210> 221

<211> 1088

<212> PRT

<213> Homo sapien

<400> 221

Met Asp Ile Tyr Asp Thr Gln Thr Leu Gly Val Val Val Phe Gly Gly  
1 5 10 15

Phe Met Val Val Ser Ala Ile Gly Ile Phe Leu Val Ser Thr Phe Ser  
20 25 30

Met Lys Glu Thr Ser Tyr Glu Glu Ala Leu Ala Asn Gln Arg Lys Glu  
35 40 45

Met Ala Lys Thr His His Gln Lys Val Glu Lys Lys Lys Lys Glu Lys  
50 55 60

Thr Val Glu Lys Lys Gly Lys Thr Lys Lys Lys Glu Glu Lys Pro Asn  
65 70 75 80

Gly Lys Ile Pro Asp His Asp Pro Ala Pro Asn Val Thr Val Leu Leu  
85 90 95

Arg Glu Pro Val Arg Ala Pro Ala Val Ala Val Ala Pro Thr Pro Val

279

100	105	110
Gln Pro Pro Ile Ile Val Ala Pro Val Ala Thr Val Pro Ala Met Pro 115 120 125		
Gln Glu Lys Leu Ala Ser Ser Pro Lys Asp Lys Lys Lys Lys Glu Lys 130 135 140		
Lys Val Ala Lys Val Glu Pro Ala Val Ser Ser Val Val Asn Ser Ile 145 150 155 160		
Gln Val Leu Thr Ser Lys Ala Ala Ile Leu Glu Thr Ala Pro Lys Glu 165 170 175		
Val Pro Met Val Val Val Pro Pro Val Gly Ala Lys Gly Asn Thr Pro 180 185 190		
Ala Thr Gly Thr Thr Gln Gly Lys Lys Ala Glu Gly Thr Gln Asn Gln 195 200 205		
Ser Lys Lys Ala Glu Gly Ala Pro Asn Gln Gly Arg Lys Ala Glu Gly 210 215 220		
Thr Pro Asn Gln Gly Lys Lys Thr Glu Gly Thr Pro Asn Gln Gly Lys 225 230 235 240		
Lys Ala Glu Gly Thr Pro Asn Gln Gly Lys Lys Ala Glu Gly Thr Pro 245 250 255		
Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln Asn Gln Gly Lys Lys Val 260 265 270		
Asp Thr Thr Pro Asn Gln Gly Lys Lys Val Glu Gly Ala Pro Thr Gln 275 280 285		
Gly Arg Lys Ala Glu Gly Ala Gln Asn Gln Ala Lys Lys Val Glu Gly 290 295 300		
Ala Gln Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln Asn Gln Gly Lys 305 310 315 320		
Lys Gly Glu Gly Ala Gln Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln 325 330 335		
Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln Asn Gln Gly Lys Lys Ala 340 345 350		

280

Glu Gly Ala Gln Asn Gln Gly Gln Lys Gly Glu Gly Ala Gln Asn Gln  
 355 360 365

Gly Lys Lys Thr Glu Gly Ala Gln Gly Lys Lys Ala Glu Arg Ser Pro  
 370 375 380

Asn Gln Gly Lys Lys Gly Glu Gly Ala Pro Ile Gln Gly Lys Lys Ala  
 385 390 395 400

Asp Ser Val Ala Asn Gln Gly Thr Lys Val Glu Gly Ile Thr Asn Gln  
 405 410 415

Gly Lys Lys Ala Glu Gly Ser Pro Ser Glu Gly Lys Lys Ala Glu Gly  
 420 425 430

Ser Pro Asn Gln Gly Lys Lys Ala Asp Ala Ala Ala Asn Gln Gly Lys  
 435 440 445

Lys Thr Glu Ser Ala Ser Val Gln Gly Arg Asn Thr Asp Val Ala Gln  
 450 455 460

Ser Pro Glu Ala Pro Lys Gln Glu Ala Pro Ala Lys Lys Lys Ser Gly  
 465 470 475 480

Ser Lys Lys Lys Gly Glu Pro Gly Pro Pro Asp Ala Asp Gly Pro Leu  
 485 490 495

Tyr Leu Pro Tyr Lys Thr Leu Val Ser Thr Val Gly Ser Met Val Phe  
 500 505 510

Asn Glu Gly Glu Ala Gln Arg Leu Ile Glu Ile Leu Ser Glu Lys Ala  
 515 520 525

Gly Ile Ile Gln Asp Thr Trp His Lys Ala Thr Gln Lys Gly Asp Pro  
 530 535 540

Val Ala Ile Leu Lys Arg Gln Leu Glu Glu Lys Glu Lys Leu Leu Ala  
 545 550 555 560

Thr Glu Gln Glu Asp Ala Ala Val Ala Lys Ser Lys Leu Arg Glu Leu  
 565 570 575

Asn Lys Glu Met Ala Ala Glu Lys Ala Lys Ala Ala Ala Gly Glu Ala  
 580 585 590

281

Lys Val Lys Lys Gln Leu Val Ala Arg Glu Gln Glu Ile Thr Ala Val  
 595 600 605

Gln Ala Arg Met Gln Ala Ser Tyr Arg Glu His Val Lys Glu Val Gln  
 610 615 620

Gln Leu Gln Gly Lys Ile Arg Thr Leu Gln Glu Gln Leu Glu Asn Gly  
 625 630 635 640

Pro Asn Thr Gln Leu Ala Arg Leu Gln Gln Glu Asn Ser Ile Leu Arg  
 645 650 655

Asp Ala Leu Asn Gln Ala Thr Ser Gln Val Glu Ser Lys Gln Asn Ala  
 660 665 670

Glu Leu Ala Lys Leu Arg Gln Glu Leu Ser Lys Val Ser Lys Glu Leu  
 675 680 685

Val Glu Lys Ser Glu Ala Val Arg Gln Asp Glu Gln Gln Arg Lys Ala  
 690 695 700

Leu Glu Ala Lys Ala Ala Ala Phe Glu Lys Gln Val Leu Gln Leu Gln  
 705 710 715 720

Ala Ser His Arg Glu Ser Glu Glu Ala Leu Gln Lys Arg Leu Asp Glu  
 725 730 735

Val Ser Arg Glu Leu Cys His Thr Gln Ser Ser His Ala Ser Leu Arg  
 740 745 750

Ala Asp Ala Glu Lys Ala Gln Glu Gln Gln Gln Met Ala Glu Leu  
 755 760 765

His Ser Lys Leu Gln Ser Ser Glu Ala Glu Val Arg Ser Lys Cys Glu  
 770 775 780

Glu Leu Ser Gly Leu His Gly Gln Leu Gln Glu Ala Arg Ala Glu Asn  
 785 790 795 800

Ser Gln Leu Thr Glu Arg Ile Arg Ser Ile Glu Ala Leu Leu Glu Ala  
 805 810 815

Gly Gln Ala Arg Asp Ala Gln Asp Val Gln Ala Ser Gln Ala Glu Ala  
 820 825 830

282

Asp Gln Gln Gln Thr Arg Leu Lys Glu Leu Glu Ser Gln Val Ser Gly  
 835 840 845

Leu Glu Lys Glu Ala Ile Glu Leu Arg Glu Ala Val Glu Gln Gln Lys  
 850 855 860

Val Lys Asn Asn Asp Leu Arg Glu Lys Asn Trp Lys Ala Met Glu Ala  
 865 870 875 880

Leu Ala Thr Ala Glu Gln Ala Cys Lys Glu Lys Leu His Ser Leu Thr  
 885 890 895

Gln Ala Lys Glu Glu Ser Glu Lys Gln Leu Cys Leu Ile Glu Ala Gln  
 900 905 910

Thr Met Glu Ala Leu Leu Ala Leu Leu Pro Glu Leu Ser Val Leu Ala  
 915 920 925

Gln Gln Asn Tyr Thr Glu Trp Leu Gln Asp Leu Lys Glu Lys Gly Pro  
 930 935 940

Thr Leu Leu Lys His Pro Pro Ala Pro Ala Glu Pro Ser Ser Asp Leu  
 945 950 955 960

Ala Ser Lys Leu Arg Glu Ala Glu Glu Thr Gln Ser Thr Leu Gln Ala  
 965 970 975

Glu Cys Asp Gln Tyr Arg Ser Ile Leu Ala Glu Thr Glu Gly Met Leu  
 980 985 990

Arg Asp Leu Gln Lys Ser Val Glu Glu Glu Glu Gln Val Trp Arg Ala  
 995 1000 1005

Lys Val Gly Ala Ala Glu Glu Glu Leu Gln Lys Val Tyr Ala Ala  
 1010 1015 1020

Leu Pro Ala Ser Arg Arg Arg Gly Ala His Glu Ala Gln Gly Arg  
 1025 1030 1035

Val Asp Arg Ile Val Ser Val Thr Cys Glu Thr Arg Val Ser Arg  
 1040 1045 1050

Trp Gly Phe Ser Thr Thr Pro Tyr Glu Ala Gln Leu Arg Asp Asp  
 1055 1060 1065

Ser Ser Val Arg Pro Pro Gly Gly Pro Arg Leu Gly Arg His Cys

283

1070

1075

1080

Gln Met Ala Pro Gly  
1085

<210> 222  
<211> 440  
<212> PRT  
<213> Homo sapien

<400> 222

Arg Val Gly Lys Ala Gly Gly Gly Asp Pro Gly Gly Gly Gly Arg Ser  
1 5 10 15

Pro Ala Leu Arg Gln Lys Val Pro Arg Leu His Thr Arg Ala Arg Ser  
20 25 30

Gln Arg Ala Ala Gly Ala Asp Gly Arg Arg Gly Gly Arg Arg Gln Gly  
35 40 45

Arg Ser Val Tyr Ser Cys Ser Gly Ala Val Ser Trp Arg Arg Leu Gly  
50 55 60

Arg Leu Leu Ser Pro Gly Ser Ala Ala Ala Ala Lys Ala Ala Ala Pro  
65 70 75 80

Ala Leu Ser Leu Ser Leu Ser Arg Leu Trp Leu Gln Val Lys Gly Lys  
85 90 95

Gln Ala Arg Met Asp Ile Tyr Asp Thr Gln Thr Leu Gly Val Val Val  
100 105 110

Phe Gly Gly Phe Met Val Val Ser Ala Ile Gly Ile Phe Leu Val Ser  
115 120 125

Thr Phe Ser Met Lys Glu Thr Ser Tyr Glu Glu Ala Leu Ala Asn Gln  
130 135 140

Arg Lys Glu Met Ala Lys Thr His His Gln Lys Val Glu Lys Lys Lys  
145 150 155 160

Lys Glu Lys Thr Val Glu Lys Lys Gly Lys Thr Lys Lys Lys Glu Glu  
165 170 175

Lys Pro Asn Gly Lys Ile Pro Asp His Asp Pro Ala Pro Asn Val Thr  
180 185 190

284

Val Leu Leu Arg Glu Pro Val Arg Ala Pro Ala Val Ala Val Ala Pro  
 195 200 205

Thr Pro Val Gln Pro Pro Ile Ile Val Ala Pro Val Ala Thr Val Pro  
 210 215 220

Ala Met Pro Gln Glu Lys Leu Ala Ser Ser Pro Lys Asp Lys Lys Lys  
 225 230 235 240

Lys Glu Lys Lys Val Ala Lys Val Glu Pro Ala Val Ser Ser Val Val  
 245 250 255

Asn Ser Ile Gln Val Leu Thr Ser Lys Ala Ala Ile Leu Glu Thr Ala  
 260 265 270

Pro Lys Glu Val Pro Met Val Val Val Pro Pro Val Gly Ala Lys Gly  
 275 280 285

Asn Thr Pro Ala Thr Gly Thr Thr Gln Gly Lys Lys Ala Glu Gly Thr  
 290 295 300

Gln Asn Gln Ser Lys Lys Ala Glu Gly Ala Pro Asn Gln Gly Arg Lys  
 305 310 315 320

Ala Glu Gly Thr Pro Asn Gln Gly Lys Lys Thr Glu Gly Thr Pro Asn  
 325 330 335

Gln Gly Lys Lys Ala Glu Gly Thr Pro Asn Gln Gly Lys Lys Ala Glu  
 340 345 350 .

Gly Thr Pro Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln Asn Gln Gly  
 355 360 365

Lys Lys Val Asp Thr Thr Pro Asn Gln Gly Lys Lys Val Glu Gly Ala  
 370 375 380

Pro Thr Gln Gly Arg Lys Ala Glu Gly Ala Gln Asn Gln Ala Lys Lys  
 385 390 395 400

Val Glu Gly Ala Gln Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln Asn  
 405 410 415

Gln Gly Lys Lys Gly Glu Gly Ala Gln Asn Gln Gly Lys Lys Ala Glu  
 420 425 430



285

Gly Ala Gln Asn Gln Pro Pro Met  
 435 440

<210> 223  
 <211> 521  
 <212> PRT  
 <213> Homo sapien

<400> 223

Met Asp Ile Tyr Asp Thr Gln Thr Leu Gly Val Val Val Phe Gly Gly  
 1 5 10 15

Phe Met Val Val Ser Ala Ile Gly Ile Phe Leu Val Ser Thr Phe Ser  
 20 25 30

Met Lys Glu Thr Ser Tyr Glu Glu Ala Leu Ala Asn Gln Arg Lys Glu  
 35 40 45

Met Ala Lys Thr His His Gln Lys Val Glu Lys Lys Lys Lys Glu Lys  
 50 55 60

Thr Val Glu Lys Lys Gly Lys Thr Lys Lys Lys Glu Glu Lys Pro Asn  
 65 70 75 80

Gly Lys Ile Pro Asp His Asp Pro Ala Pro Asn Val Thr Val Leu Leu  
 85 90 95

Arg Glu Pro Val Arg Ala Pro Ala Val Ala Val Ala Pro Thr Pro Val  
 100 105 110

Gln Pro Pro Ile Ile Val Ala Pro Val Ala Thr Val Pro Ala Met Pro  
 115 120 125

Gln Glu Lys Leu Ala Ser Ser Pro Lys Asp Lys Lys Lys Lys Glu Lys  
 130 135 140

Lys Val Ala Lys Val Glu Pro Ala Val Ser Ser Val Val Asn Ser Ile  
 145 150 155 160

Gln Val Leu Thr Ser Lys Ala Ala Ile Leu Glu Thr Ala Pro Lys Glu  
 165 170 175

Val Pro Met Val Val Val Pro Pro Val Gly Ala Lys Gly Asn Thr Pro  
 180 185 190

Ala Thr Gly Thr Thr Gln Gly Lys Lys Ala Glu Gly Thr Gln Asn Gln  
 195 200 205

286

Ser Lys Lys Ala Glu Gly Ala Pro Asn Gln Gly Arg Lys Ala Glu Gly  
 210 215 220

Thr Pro Asn Gln Gly Lys Lys Thr Glu Gly Thr Pro Asn Gln Gly Lys  
 225 230 235 240

Lys Ala Glu Gly Thr Pro Asn Gln Gly Lys Lys Ala Glu Gly Thr Pro  
 245 250 255

Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln Asn Gln Gly Lys Lys Val  
 260 265 270

Asp Thr Thr Pro Asn Gln Gly Lys Lys Val Glu Gly Ala Pro Thr Gln  
 275 280 285

Gly Arg Lys Ala Glu Gly Ala Gln Asn Gln Ala Lys Lys Val Glu Gly  
 290 295 300

Ala Gln Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln Asn Gln Gly Lys  
 305 310 315 320

Lys Gly Glu Gly Ala Gln Asn Gln Gly Lys Lys Ala Glu Gly Ala Gln  
 325 330 335

Asn Gln Pro Pro Asp Val Thr Val Leu Leu Arg Glu Pro Val Arg Ala  
 340 345 350

Pro Ala Val Ala Val Ala Pro Thr Pro Val Gln Pro Pro Ile Ile Val  
 355 360 365

Ala Pro Val Ala Thr Val Pro Ala Met Pro Gln Glu Lys Leu Ala Ser  
 370 375 380

Ser Pro Lys Asp Lys Lys Lys Lys Glu Lys Asn Val Ala Lys Val Glu  
 385 390 395 400

Pro Ala Val Ser Ser Val Val Asn Ser Ile Gln Ser Ser His Phe Glu  
 405 410 415

Gly Cys Gln Val Gly Ser Met Val Phe Asn Glu Gly Glu Ala Gln Arg  
 420 425 430

Leu Ile Glu Ile Leu Ser Glu Lys Ala Gly Ile Ile Gln Asp Thr Trp  
 435 440 445

287

His Lys Ala Thr Gln Lys Gly Asp Pro Val Ala Ile Leu Lys Arg Gln  
 450 455 460

Leu Glu Glu Lys Glu Lys Leu Leu Ala Thr Glu Gln Glu Asp Ala Ala  
 465 470 475 480

Val Ala Lys Ser Lys Leu Arg Glu Leu Asn Lys Glu Met Ala Ala Glu  
 485 490 495

Lys Ala Lys Ala Ala Ala Gly Glu Ala Lys Val Lys Lys Gln Leu Val  
 500 505 510

Ala Arg Glu Gln Glu Ile Thr Ala Arg  
 515 520

<210> 224  
 <211> 165  
 <212> PRT  
 <213> Homo sapien

<400> 224

Gly Arg Ser Gln Arg Ser Ser Pro Cys Ser Ala Pro Leu Gln Gly Pro  
 1 5 10 15

Gly Ala Leu Gly Leu Arg Thr Gln Leu Leu Leu Pro Pro Trp Ser Ser  
 20 25 30

Thr Trp Glu Gln Val Ser Ser Trp Gly Val Trp Thr Gly Gly Ala Gly  
 35 40 45

Gly Arg Thr Gln Ala Gln Lys Leu Pro Ala Pro Thr Thr Gln Leu Leu  
 50 55 60

Ser Thr Ala Leu Glu Pro Thr Ser Gln Lys Pro Gly Val Gly Ala Gly  
 65 70 75 80

His Gly Gly Asp Pro Lys Leu Ser Pro His Lys Val Gln Gly Arg Ser  
 85 90 95

Glu Ala Gly Ala Gly Pro Gly Pro Lys Gln Gly His His Ser Ser Ser  
 100 105 110

Asp Ser Ser Ser Ser Ser Asp Ser Asp Thr Asp Val Lys Ser His  
 115 120 125

Ala Ala Gly Ser Lys Gln His Glu Ser Ile Pro Gly Lys Ala Lys Lys

288

130		135		140
Pro Lys Val Lys Lys Lys Glu Lys Gly Lys Lys Glu Lys Gly Lys Lys				
145		150		155 160
Lys Glu Ala Pro His				
		165		
<210> 225				
<211> 262				
<212> PRT				
<213> Homo sapien				
<400> 225				
Gly Arg Ser Gln Arg Ser Ser Pro Cys Ser Ala Pro Leu Gln Gly Pro				
1		5		10 15
Gly Ala Leu Gly Leu Arg Thr Gln Leu Leu Leu Pro Pro Trp Ser Ser				
	20		25	30
Thr Trp Glu Gln Val Ser Ser Trp Gly Val Trp Thr Gly Gly Ala Gly				
	35		40	45
Gly Arg Thr Gln Ala Gln Lys Leu Pro Ala Pro Thr Thr Gln Leu Leu				
	50		55	60
Ser Thr Ala Leu Glu Pro Thr Ser Gln Lys Pro Gly Val Gly Ala Gly				
65		70		75 80
His Gly Gly Asp Pro Lys Leu Ser Pro His Lys Val Gln Gly Arg Ser				
	85		90	95
Glu Ala Gly Ala Gly Pro Gly Pro Lys Val Ser Arg Leu Ile Thr Gly				
	100		105	110
Cys Gly Gly Ala Gly Arg Leu Gly Leu Pro Leu Thr Pro Gly Ser Cys				
	115		120	125
Leu Arg Pro Pro Thr Ser Gly Gly Trp Val Arg Gly Ala Ala Ser Leu				
	130		135	140
Pro His Leu His Pro Ala Arg Thr Pro Gln Leu Phe Arg Leu Gln Gln				
145		150		155 160
Gln Leu Gln Arg Phe Gly His Gly Cys Glu Gly Lys Gly Leu Ser Pro				
	165		170	175

289

Ala Ser Pro Ser Thr Cys Pro Ala Pro Gln Arg Gly Val Pro Ala Leu  
 180 185 190

Gly Leu Ala Gly Arg Val Arg Gly Val Val Pro Leu Ser Arg Phe Gln  
 195 200 205

Pro Arg Thr Ile Ser Ser Leu Pro Ser Leu Pro Ser Ala Pro Gln Ser  
 210 215 220

His Ala Ala Gly Ser Lys Gln His Glu Ser Ile Pro Gly Lys Ala Lys  
 225 230 235 240

Lys Pro Lys Val Lys Lys Lys Glu Lys Gly Lys Lys Glu Lys Gly Lys  
 245 250 255

Lys Lys Glu Ala Pro His  
 260

<210> 226  
 <211> 231  
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<220>  
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 <223> X=any amino acid

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 <223> X=any amino acid

<400> 226

Ser Arg Asp Pro Asn Gly Trp Trp Arg Arg Leu Arg Val Ser Ala Glu  
 1 5 10 15

Leu Ala Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu  
 20 25 30

Ala Leu Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg  
 35 40 45

Glu Arg Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg  
 50 55 60

Cys Arg Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser

290

65	70	75	80
Cys Gln Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr	85	90	95
Leu Thr Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn	100	105	110
Ala Thr Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val	115	120	125
Pro Ser Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met	130	135	140
Phe Asn Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys	145	150	155
Arg Ala Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys	165	170	175
Asn Asn Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg	180	185	190
Ser Glu Glu Ala Cys Met Leu Arg Cys Phe Gln Gly Asn Xaa Pro Ala	195	200	205
Leu Xaa Gln Gly Gly Pro Gly Gly Gly Pro Arg Gly Asp Pro Ser Gly	210	215	220
Arg Pro Gly Asp Arg Thr Gly	225	230	
<210> 227			
<211> 213			
<212> PRT			
<213> Homo sapien			
<400> 227			
Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu	1	5	10
Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg	20	25	30
Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg	35	40	45

291

Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln  
 50 55 60

Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr  
 65 70 75 80

Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr  
 85 90 95

Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser  
 100 105 110

Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn  
 115 120 125

Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala  
 130 135 140

Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn  
 145 150 155 160

Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu  
 165 170 175

Glu Ala Cys Met Leu Arg Cys Phe Gln Arg Glu Leu Pro Trp Pro Trp  
 180 185 190

Ala Lys Gly Gly Arg Gly Ala Ala Arg Gly Gly Thr Pro Arg Gly Ala  
 195 200 205

Gln Gly Thr Glu Pro  
 210

<210> 228

<211> 242

<212> PRT

<213> Homo sapien

<400> 228

Met Ala Gln Leu Cys Gly Leu Arg Arg Ser Arg Ala Phe Leu Ala Leu  
 1 5 10 15

Leu Gly Ser Leu Leu Leu Ser Gly Val Leu Ala Ala Asp Arg Glu Arg  
 20 25 30

Ser Ile His Asp Phe Cys Leu Val Ser Lys Val Val Gly Arg Cys Arg

292

35

40

45

Ala Ser Met Pro Arg Trp Trp Tyr Asn Val Thr Asp Gly Ser Cys Gln  
 50 55 60

Leu Phe Val Tyr Gly Gly Cys Asp Gly Asn Ser Asn Asn Tyr Leu Thr  
 65 70 75 80

Lys Glu Glu Cys Leu Lys Lys Cys Ala Thr Val Thr Glu Asn Ala Thr  
 85 90 95

Gly Asp Leu Ala Thr Ser Arg Asn Ala Ala Asp Ser Ser Val Pro Ser  
 100 105 110

Ala Pro Arg Arg Gln Asp Ser Glu Asp His Ser Ser Asp Met Phe Asn  
 115 120 125

Tyr Glu Glu Tyr Cys Thr Ala Asn Ala Val Thr Gly Pro Cys Arg Ala  
 130 135 140

Ser Phe Pro Arg Trp Tyr Phe Asp Val Glu Arg Asn Ser Cys Asn Asn  
 145 150 155 160

Phe Ile Tyr Gly Gly Cys Arg Gly Asn Lys Asn Ser Tyr Arg Ser Glu  
 165 170 175

Glu Ala Cys Met Leu Arg Cys Phe Arg Gln Gln Glu Asn Pro Pro Leu  
 180 185 190

Pro Leu Gly Ser Lys Gly Lys Trp Pro Leu Thr Leu Leu Leu Pro Ser  
 195 200 205

Ala Cys Leu Leu Pro Ser Leu Thr Glu Leu Ser Pro Ala Gln Leu Trp  
 210 215 220

Phe Thr Leu Ser Phe Thr Val Asn Ile Ile Leu Ala Glu Ser His Val  
 225 230 235 240

Ser Ala

<210> 229

<211> 53

<212> PRT

<213> Homo sapien

<400> 229



293

Arg Phe Trp Leu Ala Ile Gly Cys Trp Pro Ser Arg Gln Ser Arg Glu  
 1 5 10 15

Gln His Ile Ser Ser Arg Arg Lys Met Glu Ile Leu Lys Thr Glu Cys  
 20 25 30

Gln Glu Lys Glu Ser Arg Thr Ile His Ser Met Arg Arg Lys Met Glu  
 35 40 45

Lys Lys Asn Phe Ile  
 50

<210> 230  
 <211> 43  
 <212> PRT  
 <213> Homo sapien

<400> 230

Met Asp Arg Pro Pro Gly Gln Val Pro Gly His Leu Gly Gln Cys Asp  
 1 5 10 15

Val Ser Gly Trp Gln Ser Asp Ala Gly Pro Ala Gly Ser Gln Glu Asn  
 20 25 30

Ser Thr Leu Val Pro Glu Glu Arg Trp Lys Phe  
 35 40

<210> 231  
 <211> 66  
 <212> PRT  
 <213> Homo sapien

<400> 231

Val Ala Ala Glu Val Pro Gly His Leu Gly Gln Cys Asp Val Ser Gly  
 1 5 10 15

Trp Gln Ser Asp Ala Gly Pro Ala Gly Ser Gln Glu Asn Ser Thr Leu  
 20 25 30

Val Pro Glu Glu Arg Trp Glu Ile Leu Lys Thr Glu Cys Gln Glu Lys  
 35 40 45

Glu Ser Arg Thr Ile His Ser Met Arg Arg Lys Met Glu Lys Lys Asn  
 50 55 60

Phe Ile  
 65

294

<210> 232  
<211> 34  
<212> PRT  
<213> Homo sapien

<400> 232

Met Asp Arg Ser Arg Pro Arg Tyr Leu Ala Ile Leu Gly Ser Val Thr  
1 5 10 15

Phe Leu Ala Gly Asn Arg Met Leu Ala Gln Gln Ala Val Lys Arg Thr  
20 25 30

Ala His

<210> 233  
<211> 116  
<212> PRT  
<213> Homo sapien

<220>  
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<223> X=any amino acid

<220>  
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<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (39)..(39)  
<223> X=any amino acid

<220>  
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<222> (41)..(41)  
<223> X=any amino acid

295

<220>  
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<222> (44)..(44)  
<223> X=any amino acid

<220>  
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<222> (57)..(57)  
<223> X=any amino acid

<220>  
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<222> (59)..(60)  
<223> X=any amino acid

<220>  
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<222> (65)..(66)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (69)..(69)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (71)..(71)  
<223> X=any amino acid

<220>  
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<222> (75)..(76)  
<223> X=any amino acid

<220>  
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<222> (80)..(81)  
<223> X=any amino acid

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<223> X=any amino acid

<220>  
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<222> (97)..(97)  
<223> X=any amino acid

296

<220>  
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<222> (115)..(115)  
<223> X=any amino acid

<400> 233

Met Val Xaa Xaa Arg Pro Ser Pro Leu Xaa Xaa Asp Leu Asn Ala Pro  
1 5 10 15

Ser Asp Trp Asp Ser Arg Gly Lys Asp Ser Tyr Glu Thr Arg Xaa Leu  
20 25 30

Asp Xaa Lys Ser Ala Glu Xaa Lys Xaa Lys Lys Xaa Ser Arg Leu Tyr  
35 40 45

Lys Arg Lys Ala Asn Asp Glu Ser Xaa Glu Xaa Xaa Asp Val Ile Asp  
50 55 60

Xaa Xaa Glu Leu Xaa Lys Xaa Ser Arg Glu Xaa Xaa Ser His Glu Xaa  
65 70 75 80

Xaa Ser Xaa Glu Asp Met Leu Val Val Asp Ala Lys Ser Lys Glu Glu  
85 90 95

Xaa Lys His Leu Lys Phe Arg Ile Ser His Glu Leu Asp Ser Ala Ser  
100 105 110

Ser Glu Xaa Asn  
115

<210> 234  
<211> 122  
<212> PRT  
<213> Homo sapien

<220>  
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<223> X=any amino acid

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<223> X=any amino acid

<220>  
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<222> (37)..(37)  
<223> X=any amino acid

297

<220>  
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 <222> (40)..(40)  
 <223> X=any amino acid

<220>  
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 <223> X=any amino acid

<220>  
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 <222> (47)..(47)  
 <223> X=any amino acid

<220>  
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 <222> (87)..(87)  
 <223> X=any amino acid

<400> 234

Met Glu Ser Glu Glu Leu Asn Gly Xaa Xaa Lys Ala Ile Pro Val Xaa  
 1 5 10 15

Xaa Asp Leu Asn Ala Pro Ser Asp Trp Asp Ser Arg Gly Lys Asp Ser  
 20 25 30

Tyr Glu Thr Arg Xaa Leu Asp Xaa Lys Ser Ala Glu Xaa Lys Xaa Lys  
 35 40 45

Lys Lys Ser Arg Leu Tyr Lys Arg Lys Ala Asn Asp Glu Ser Lys Glu  
 50 55 60

Gln Ala Asp Val Ile Asp Arg Lys Glu Leu Ala Lys Asp Ser Arg Glu  
 65 70 75 80

Ala Asn Ser His Glu Phe Xaa Ser Lys Glu Asp Met Leu Val Val Asp  
 85 90 95

Ala Lys Ser Lys Glu Glu Glu Lys His Leu Lys Phe Arg Ile Ser His  
 100 105 110

Glu Leu Asp Ser Ala Ser Ser Glu Phe Asn  
 115 120

<210> 235

298

<211> 86  
<212> PRT  
<213> Homo sapien

<400> 235

Leu Ser Gly Leu Phe Arg Ser Leu Glu Val Ile Phe Val Ile Phe Phe  
1 5 10 15

Leu Asn Tyr Phe Arg Glu Leu Gly Met Gln Met Phe Ser Val Arg Lys  
20 25 30

Pro Leu Phe Thr Leu Trp Lys Leu Asn Lys Lys Cys Ile Cys Leu Arg  
35 40 45

Asn Trp Arg Leu Leu Met Leu Gly Asn Thr Cys Asn Gly Ser Arg Gly  
50 55 60

Asn Cys Val Ser Val Phe Gly Asn Glu Ile Tyr Gly Lys Pro Phe Phe  
65 70 75 80

Lys Leu Val Met Leu Leu  
85

<210> 236  
<211> 30  
<212> PRT  
<213> Homo sapien

<400> 236

Lys Ser Gly Ile Asn Ala Glu Gly Pro Leu Arg Pro Gly Ala Ala Ile  
1 5 10 15

Leu Gly Leu Leu Gly Leu Ala Ser Val Gly Asp Ser Arg Thr  
20 25 30

<210> 237  
<211> 125  
<212> PRT  
<213> Homo sapien

<220>  
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<223> X=any amino acid

299

<220>  
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 <222> (92)..(92)  
 <223> X=any amino acid

<400> 237

Gln Arg Leu Gln Arg Val Ala Gly Ile Thr Gly Thr Cys His His Thr  
 1 5 10 15

Gln Leu Ile Phe Ile Phe Leu Val Glu Thr Gly Phe His His Val Gly  
 20 25 30

Gln Ala Gly Phe Glu Leu Leu Ile Trp Trp Ser Ala Cys Leu Gly Leu  
 35 40 45

Pro Glu Cys Trp Asp Tyr Arg Arg Lys Pro Pro Arg Leu Ala Lys Lys  
 50 55 60

Ile Lys Ile Tyr Leu Xaa Tyr Val Leu Thr Ser Tyr Thr Gln Arg Ile  
 65 70 75 80

Leu Asp Phe Xaa Leu Lys Ile Ile Ile Lys Pro Xaa Ile Ser Pro Val  
 85 90 95

Glu Lys Glu Ile Leu Arg Phe Leu Cys Phe Phe Phe Gln His Asn Ser  
 100 105 110

Val Thr Tyr Gly Trp Glu Lys Ile Cys Arg Glu Ile Ile  
 115 120 125

<210> 238  
 <211> 104  
 <212> PRT  
 <213> Homo sapien

<400> 238

Thr Arg Thr Gln Arg Gly Thr Ile Gly Gln Asn Ile Ser His Thr His  
 1 5 10 15

Gln Arg His Thr Lys Pro Pro Thr His Ala Ile Thr Arg Pro Leu Ile  
 20 25 30

Arg Thr Leu Ala Glu Pro Asp Trp Lys Ser Thr Arg Ser Thr Lys Tyr  
 35 40 45

Ile Gly Asn Pro Pro His Arg Asn Pro Lys Leu Asp Lys Ala Lys Ile

300

50

55

60

Thr Ala Thr Thr Pro Ile Asn Lys Lys Pro Asn Thr Arg His Thr Arg  
65 70 75 80

Asn Pro Pro Pro Asn Arg Arg Pro Met Pro Ile His Gln Gln Thr His  
85 90 95

Thr Lys Asp Lys Lys Arg His Glu  
100

&lt;210&gt; 239

&lt;211&gt; 61

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 239

Met His Gln Gly Arg Glu His Ser Ala Gln Thr Ile Asp Ser Asp Tyr  
1 5 10 15

Leu Leu Thr Val Cys Arg Arg His Ala Gly Gly Leu Lys Arg Gly Cys  
20 25 30

Ile Leu Leu Pro Ser Leu Ala Gly Tyr Gly Ile Ser Ser Phe Pro Phe  
35 40 45

Ile Gly Tyr Glu Val Tyr Ser Ser Ile Tyr Gln Asn Leu  
50 55 60

&lt;210&gt; 240

&lt;211&gt; 193

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 240

Ser Gly Gly Phe Thr Leu Arg Ser Thr Gly Ser Ala Ala Gly Arg Gly  
1 5 10 15

Leu Arg Lys Leu Arg Pro Thr Leu Ser Arg Gly Ala Cys Asp Val Gly  
20 25 30

Arg Ser Val Trp Lys Leu Arg Pro Ser His Cys Arg Val Gly Arg Gly  
35 40 45

Ala Arg Gly Ile Phe His Ala Pro Pro Leu Cys Arg Leu Lys Cys Val  
50 55 60



301

Gly Gly Lys Arg Trp Ala Gly Cys His Leu Ala Pro Pro Phe Ser Cys  
65 70 75 80

Gly Val Gly Gln Ala Ala Ala Ser Ser Ser Cys Ser Ser His Arg Leu  
85 90 95

His Ser Asp Pro Ser Pro Ala Ala Trp Ile Leu Leu Pro Arg Arg Gly  
100 105 110

Ser Phe Ser Arg Asn Leu Arg Ala Arg Pro Gln Ser Val Pro Ala Ala  
115 120 125

Ser Arg Arg Thr Arg Trp Leu Gln Ala Ser Leu Pro Gln Val Ser Trp  
130 135 140

Leu Arg Glu Arg Gln Arg Glu Arg Gly Gly Lys Thr Arg Glu Gln Ala  
145 150 155 160

Met Gly Gly Asp Gly Glu Ser Leu Leu Glu Gln Thr Arg Gly Arg Lys  
165 170 175

Pro Thr Phe Leu His Ser Pro Ser Ile His Leu Trp Pro Tyr Val Phe  
180 185 190

His

<210> 241  
<211> 163  
<212> PRT  
<213> Homo sapien

&lt;400&gt; 241

Ser Gly Gly Phe Thr Leu Arg Ser Thr Gly Ser Ala Ala Gly Arg Gly  
1 5 10 15

Leu Arg Lys Leu Arg Pro Thr Leu Ser Arg Gly Ala Cys Asp Val Gly  
20 25 30

Arg Ser Val Trp Lys Leu Arg Pro Ser His Cys Arg Val Gly Arg Gly  
35 40 45

Ala Arg Gly Ile Phe His Ala Pro Pro Leu Cys Arg Leu Lys Cys Val  
50 55 60

Gly Gly Lys Arg Trp Ala Gly Cys His Leu Ala Pro Pro Phe Ser Cys  
65 70 75 80

302

Gly Val Gly Gln Ala Ala Ala Ser Ser Ser Cys Ser Ser His Arg Leu  
85 90 95

His Ser Asp Pro Ser Pro Ala Ala Trp Ile Leu Leu Pro Arg Arg Gly  
100 105 110

Ser Phe Ser Arg Asn Leu Arg Ala Arg Pro Gln Ser Val Pro Ala Ala  
115 120 125

Ser Arg Arg Thr Arg Trp Leu Gln Ala Ser Leu Thr Pro Gly Phe Leu  
130 135 140

Ala Lys Arg Glu Thr Glu Gly Glu Arg Gly Glu Asp Glu Arg Thr Gly  
145 150 155 160

Asn Gly Arg

<210> 242

<211> 227

<212> PRT

<213> Homo sapien

<220>

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<222> (3)..(4)

<223> X=any amino acid

<400> 242

Phe Phe Xaa Xaa Lys Glu Ala Gly Pro Pro Gly Leu Lys Thr His Ala  
1 5 10 15

Gly Val Gly Pro Phe Trp Pro Val Gly Phe Leu Lys Pro Gln Trp Arg  
20 25 30

Ala Leu Ser Ser Ser Phe Ser Gln Asn Pro Pro Gly Gly Leu Pro Leu  
35 40 45

His Ser Phe Pro Asn Ser Gly Leu Pro Arg Arg His Arg Glu Thr Leu  
50 55 60

Phe Gly Leu Pro Ser Lys Ser Arg Ala Met Leu Lys His Pro Trp Gly  
65 70 75 80

Pro Gln Pro Phe Ser Pro Ser Val Pro Ala Lys Glu Pro Gln Gly Pro  
85 90 95

303

Gly Gly His Gly Ala Arg Phe Arg Val Ala Lys Lys Ser Leu Val Pro  
 100 105 110

Asn Gln Gly Ala Ser Gln Gly Ala Leu Leu Lys Thr Leu Ser Pro Thr  
 115 120 125

Val Ile Trp Arg Gly Val Asn Ala Gly Gly Lys Pro Pro Arg Pro His  
 130 135 140

Gln Arg Gly Phe Gln Lys Glu Gln Pro Ala Arg Gly Pro Arg Leu Arg  
 145 150 155 160

Asn Asn Arg Arg Glu Thr Thr Gly Trp Ala Glu Pro Arg Val Lys Tyr  
 165 170 175

Pro Trp Leu Pro Ala Arg Asp Gly Asp Arg Arg Arg Ala Trp Cys Cys  
 180 185 190

Thr Trp Cys Tyr Trp Cys Ala Arg Lys Lys Tyr Pro Gly Leu Val Leu  
 195 200 205

Glu Val Pro Arg Asp Lys Leu Thr Ala Ala Gly Met Lys Thr Asp Glu  
 210 215 220

Gly Pro His  
 225

<210> 243  
 <211> 198  
 <212> PRT  
 <213> Homo sapien

<400> 243

Met Ala Cys Pro Phe Glu Leu Leu Phe Ser Lys Pro Pro Trp Gly Pro  
 1 5 10 15

Ser Pro Pro Leu Leu Pro Lys Phe Trp Ser Pro Gln Lys Thr Gln Gly  
 20 25 30

Asn Ile Val Trp Ser Ala Gln Gln Ile Lys Gly Asn Ala Gln Thr Pro  
 35 40 45

Met Gly Ala Pro Thr Leu Gln Pro Val Arg Ala Arg Gln Arg Thr Pro  
 50 55 60

304

Arg Pro Trp Gly Thr Trp Gly Ser Leu Gln Ser Cys Gln Lys Lys Pro  
65 70 75 80

Cys Ala Lys Ser Gly Gly Leu Pro Arg Gly Ser Val Glu Asn Ile Val  
85 90 95

Pro Tyr Gly Asp Met Glu Gly Gly Gln Cys Arg Gly Glu Ala Thr Lys  
100 105 110

Ala Thr Ile Asn Gly Asp Ser Arg Arg Ser Ser Gln Gln Gly Ala His  
115 120 125

Gly Tyr Glu Ile Thr Ala Glu Lys Pro Pro Val Gly Arg Asn Arg Val  
130 135 140

Ser Asn Thr Leu Gly Cys Pro Gln Gly Thr Gly Thr Gly Ala Glu His  
145 150 155 160

Gly Ala Val Leu Gly Val Thr Gly Val Leu Arg Lys Lys Tyr Pro Gly  
165 170 175

Leu Val Leu Glu Val Pro Arg Asp Lys Leu Thr Ala Ala Gly Met Lys  
180 185 190

Thr Asp Glu Gly Pro His  
195

<210> 244  
<211> 103  
<212> PRT  
<213> Homo sapien

<400> 244

Pro Lys Asp Ala Pro Glu Lys Leu Glu Asn Leu Phe Gln Val Gly Arg  
1 5 10 15

Arg Val Gly Asp Thr Lys Ile Thr Leu Leu Tyr Arg Thr Leu Gln Leu  
20 25 30

Ser Met Gln Glu Ile Pro Phe Ser Leu Ser Ala Pro Gly Lys Thr Gln  
35 40 45

Gln Pro Thr Glu Ala Ile Gly Asp Ser Leu Ser Thr Arg Gly Met Phe  
50 55 60

Ser Lys Gln Gly Val Pro Cys Leu Ser Asn Lys Cys Pro Pro Ser Leu  
65 70 75 80

305

Leu Gly Phe Leu Phe Leu Gln Leu Val Val Ser Lys Pro Leu Pro Gly  
                             85                            90                            95

Ile Val Lys Ala Leu Pro Lys  
                             100

<210> 245  
 <211> 65  
 <212> PRT  
 <213> Homo sapien

<400> 245

Met Leu Pro Pro Ala Thr Ala Gln Leu Cys Leu Phe Asp Pro Arg Ala  
 1                            5                            10                            15

Val Ala Gly Leu Tyr Ile Ser Leu Tyr Asp His Lys Leu Pro Ala Asn  
                             20                            25                            30

Glu Ser Ile Cys Val Asp Asn Leu Thr Tyr Asn Ile Leu Ser Lys Ile  
                             35                            40                            45

Met His Phe Arg Gln Thr Asp Ile Ser Leu Phe Ser Ile Tyr Ser Phe  
                             50                            55                            60

Phe  
 65

<210> 246  
 <211> 103  
 <212> PRT  
 <213> Homo sapien

<400> 246

Pro Lys Asp Ala Pro Glu Lys Leu Glu Asn Leu Phe Gln Val Gly Arg  
 1                            5                            10                            15

Arg Val Gly Asp Thr Lys Ile Thr Leu Leu Tyr Arg Thr Leu Gln Leu  
                             20                            25                            30

Ser Met Gln Glu Ile Pro Phe Ser Leu Ser Ala Pro Gly Lys Thr Gln  
                             35                            40                            45

Gln Pro Thr Glu Ala Ile Gly Asp Ser Leu Ser Thr Arg Gly Met Phe  
                             50                            55                            60

Ser Lys Gln Gly Val Pro Cys Leu Ser Asn Lys Cys Pro Pro Ser Leu

65					70					75					80
Leu	Gly	Phe	Leu	Phe	Leu	Gln	Leu	Val	Val	Ser	Lys	Pro	Leu	Pro	Gly
				85					90					95	

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<210> 247
<211> 27
<212> PRT
<213> Homo sapien
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Met Lys Leu Leu Thr Pro Pro Gly Ala Asp Ser His Leu Asn Ser Thr  
1 5 10 15

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<210> 248
<211> 154
<212> PRT
<213> Homo sapien
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Met Ala Ala Met Ala Ser Leu Gly Ala Leu Ala Leu Leu Leu Leu Ser  
1 5 10 15

Pro Ser Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr Glu Thr Val  
35 40 45

Ala Leu Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val Thr Arg Gly  
65 70 75 80

Ala His Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu Glu Ser Tyr  
100 105 110

307

Ser Leu Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile Ser Ile Ile  
 115 120 125

Pro Pro Leu Phe Thr Val Ser Val Asp His Arg Val Ser Gly Leu Val  
 130 135 140

Pro Pro Pro Phe Trp Gly Cys Trp Ala Glu  
 145 150

<210> 249

<211> 176

<212> PRT

<213> Homo sapien

<400> 249

Leu Val Gln Ala Val Cys Gly Ser Glu Leu Arg Leu Ala Trp Pro Pro  
 1 5 10 15

Gly Leu Arg Val Ile Gly Pro Ser Val Ala Glu Ala Cys Leu Glu Pro  
 20 25 30

Gln Ile Thr Pro Ser Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr  
 35 40 45

Glu Thr Val Phe Ile Val Glu Ile Ser Leu Thr Cys Lys Asn Arg Val  
 50 55 60

Gln Asn Met Ala Leu Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val  
 65 70 75 80

Thr Arg Gly Gln Asp Val Gly Arg Tyr Gln Val Ser Trp Ser Leu Asp  
 85 90 95

His Lys Ser Ala His Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu  
 100 105 110

Glu Ser Tyr Ser Leu Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile  
 115 120 125

Ser Ile Ile Pro Pro Leu Phe Thr Val Ser Val Asp His Arg Gly Thr  
 130 135 140

Trp Asn Gly Pro Trp Val Ser Thr Glu Val Leu Ala Ala Ala Ile Gly  
 145 150 155 160

Leu Val Ile Tyr Tyr Leu Ala Phe Ser Ala Lys Ser His Ile Gln Ala  
 165 170 175

308

<210> 250  
 <211> 271  
 <212> PRT  
 <213> Homo sapien

<400> 250

Ala Thr Tyr Ala Ser Leu Phe Leu Val Cys Pro Ser Cys Ser Trp Glu  
 1 5 10 15

Leu Val Phe Phe Ser Ser Arg Gln Arg Arg Gly Asp Gly Gly Asp Gly  
 20 25 30

Ile Ser Arg Arg Pro Gly Ala Ala Pro Ala Val Gln Pro Leu Pro Leu  
 35 40 45

Leu Arg Lys Arg Trp Gly Gln Ser Ser Pro Ser Val Asn Trp Pro Gly  
 50 55 60

Ala Glu Thr Leu Ser Leu Ile Leu Lys Ala Pro Val His Cys Leu Pro  
 65 70 75 80

Ala Ala Pro Thr Pro Asp Val Ser Ala Glu Asp Ala Phe Ser Asn Ser  
 85 90 95

Ser Arg Pro Phe Val Ala Leu Asn Val Arg Leu Ala Trp Pro Pro Gly  
 100 105 110

Leu Arg Val Ile Gly Pro Ser Val Ala Glu Ala Cys Leu Glu Pro Gln  
 115 120 125

Ile Thr Pro Ser Tyr Tyr Thr Thr Ser Asp Ala Val Ile Ser Thr Glu  
 130 135 140

Thr Val Phe Ile Val Glu Ile Ser Leu Thr Cys Lys Asn Arg Val Gln  
 145 150 155 160

Asn Met Ala Leu Tyr Ala Asp Val Gly Gly Lys Gln Phe Pro Val Thr  
 165 170 175

Arg Gly Gln Asp Val Gly Arg Tyr Gln Val Ser Trp Ser Leu Asp His  
 180 185 190

Lys Ser Ala His Ala Gly Thr Tyr Glu Val Arg Phe Phe Asp Glu Glu  
 195 200 205



309

Ser Tyr Ser Leu Leu Arg Lys Ala Gln Arg Asn Asn Glu Asp Ile Ser  
 210 215 220

Ile Ile Pro Pro Leu Phe Thr Val Ser Val Asp His Arg Gly Thr Trp  
 225 230 235 240

Asn Gly Pro Trp Val Ser Thr Glu Val Leu Ala Ala Ala Ile Gly Leu  
 245 250 255

Val Ile Tyr Tyr Leu Ala Phe Ser Ala Lys Ser His Ile Gln Ala  
 260 265 270

<210> 251

<211> 268

<212> PRT

<213> Homo sapien

<400> 251

Met Lys Ser Val Ile Phe Gln Phe Gly Ile Lys Val Ser Phe Ser Val  
 1 5 10 15

Ala Ala Lys Cys Leu Val Met Lys Ala Glu Met Asn Gly Ser Lys Leu  
 20 25 30

Gly Arg Arg Ala Lys Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu  
 35 40 45

Tyr Asp Pro Asp Cys Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys  
 50 55 60

Asn Gly Thr Ser Met Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg  
 65 70 75 80

Thr Asp Lys Asp Thr Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr  
 85 90 95

Trp Ile Ile Ile Glu Leu Lys His Lys Ala Arg Glu Lys Pro Tyr Asp  
 100 105 110

Ser Lys Ser Leu Arg Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr  
 115 120 125

Gln Leu Asp Pro Lys Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val  
 130 135 140

Ile Thr Ile Asp Leu Val Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp  
 145 150 155 160

310

Val Asp Ile Ala Asp Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly  
 165 170 175

Glu Ser Leu Phe His Ser Lys Lys Met Asp Leu Thr Val Asn Gly Glu  
 180 185 190

Gln Leu Asp Leu Asp Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu  
 195 200 205

Lys Ala Pro Glu Phe Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala  
 210 215 220

Val Ile Val Val Val Val Ile Ala Val Val Ala Gly Ile Val Val Leu  
 225 230 235 240

Val Ile Ser Arg Lys Lys Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile  
 245 250 255

Lys Glu Met Gly Glu Met His Arg Glu Leu Asn Ala  
 260 265

<210> 252

<211> 342

<212> PRT

<213> Homo sapien .

<400> 252

Met Glu Thr Lys His Leu Gly Arg Gly Gly Ala Gly Arg Ala Gly Pro  
 1 5 10 15

His Leu Trp Arg Gly Pro Arg Pro Asn Cys Ser Ala Gly Ala Gly Gly  
 20 25 30

Gly Glu Pro Thr His Ser Pro Asn Ser Arg Ala Val Thr His Gln Arg  
 35 40 45

Ala Pro Ala Ala Arg Glu Cys Val Cys Glu Asn Tyr Lys Leu Ala Val  
 50 55 60

Asn Cys Phe Val Asn Asn Asn Arg Gln Cys Gln Cys Thr Ser Val Gly  
 65 70 75 80

Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala Lys Cys Leu Val  
 85 90 95

311

Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg Arg Ala Lys Pro  
 100 105 110

Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp Pro Asp Cys Asp  
 115 120 125

Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly Thr Ser Met Cys  
 130 135 140

Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp Lys Asp Thr Glu  
 145 150 155 160

Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile Ile Ile Glu Leu  
 165 170 175

Lys His Lys Ala Arg Glu Lys Pro Tyr Asp Ser Lys Ser Leu Arg Thr  
 180 185 190

Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu Asp Pro Lys Phe  
 195 200 205

Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr Ile Asp Leu Val  
 210 215 220

Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp Val Asp Ile Ala Asp Val  
 225 230 235 240

Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser Leu Phe His Ser  
 245 250 255

Lys Lys Met Asp Leu Thr Val Asn Gly Glu Gln Leu Asp Leu Asp Pro  
 260 265 270

Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala Pro Glu Phe Ser  
 275 280 285

Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile Val Val Val Val  
 290 295 300

Ile Ala Val Val Ala Gly Ile Val Val Leu Val Ile Ser Arg Lys Lys  
 305 310 315 320

Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu Met Gly Glu Met  
 325 330 335

His Arg Glu Leu Asn Ala

312

340

<210> 253  
 <211> 240  
 <212> PRT  
 <213> Homo sapien

<400> 253

Met Ala Pro Pro Gln Val Leu Ala Phe Gly Leu Leu Leu Ala Ala Ala  
 1 5 10 15

Thr Ala Thr Phe Ala Ala Ala Gln Glu Glu Cys Val Cys Glu Asn Tyr  
 20 25 30

Lys Leu Ala Val Asn Cys Phe Val Asn Asn Asn Arg Gln Cys Gln Cys  
 35 40 45

Thr Ser Val Gly Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala  
 50 55 60

Lys Cys Leu Val Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg  
 65 70 75 80

Arg Ala Lys Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp  
 85 90 95

Pro Asp Cys Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly  
 100 105 110

Thr Ser Met Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp  
 115 120 125

Lys Asp Thr Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile  
 130 135 140

Ile Ile Glu Leu Lys His Lys Ala Arg Glu Lys Pro Tyr Asp Ser Lys  
 145 150 155 160

Ser Leu Arg Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu  
 165 170 175

Asp Pro Lys Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr  
 180 185 190

Ile Asp Leu Val Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp Val Asp  
 195 200 205

313

Ile Ala Asp Val Ala Tyr Tyr Phe Glu Lys Asp Asp Val Ser Ile Ile  
 210 215 220

Phe Phe Ile Pro Val Phe Arg Asn Val Val Tyr His Ala Ser Met Asn  
 225 230 235 240

<210> 254

<211> 390

<212> PRT

<213> Homo sapien

<400> 254

Met Ala Pro Pro Gln Val Leu Ala Phe Gly Leu Leu Leu Ala Ala Ala  
 1 5 10 15

Thr Ala Thr Phe Ala Ala Ala Gln Glu Gly Glu Ala Arg Ile Gly Ala  
 20 25 30

Glu Leu Trp Ser Trp Ala Gly Leu Gly Gly Ser Gly Pro Arg Pro Ser  
 35 40 45

Ala Pro Glu Thr Gly Ile Ile Gly Arg Gly Pro Arg Gly Arg Ala Phe  
 50 55 60

Gln Arg Gly Asp Arg Thr Val Arg Pro Cys Ser Gly Ser Gly Pro Pro  
 65 70 75 80

Arg Gly Arg Lys Arg Arg Gly Pro Ser Arg Gly Ala Ala Ser Leu Arg  
 85 90 95

Ser Phe Ala Arg Leu Glu Cys Val Cys Glu Asn Tyr Lys Leu Ala Val  
 100 105 110

Asn Cys Phe Val Asn Asn Asn Arg Gln Cys Gln Cys Thr Ser Val Gly  
 115 120 125

Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala Lys Cys Leu Val  
 130 135 140

Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg Arg Ala Lys Pro  
 145 150 155 160

Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp Pro Asp Cys Asp  
 165 170 175

Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly Thr Ser Met Cys

314

180	185	190
Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp Lys Asp Thr Glu		
195	200	205
Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile Ile Ile Glu Leu		
210	215	220
Lys His Lys Ala Arg Glu Lys Pro Tyr Asp Ser Lys Ser Leu Arg Thr		
225	230	235
Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu Asp Pro Lys Phe		
245	250	255
Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr Ile Asp Leu Val		
260	265	270
Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp Val Asp Ile Ala Asp Val		
275	280	285
Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser Leu Phe His Ser		
290	295	300
Lys Lys Met Asp Leu Thr Val Asn Gly Glu Gln Leu Asp Leu Asp Pro		
305	310	315
Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala Pro Glu Phe Ser		
325	330	335
Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile Val Val Val Val		
340	345	350
Ile Ala Val Val Ala Gly Ile Val Val Leu Val Ile Ser Arg Lys Lys		
355	360	365
Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu Met Gly Glu Met		
370	375	380
His Arg Glu Leu Asn Ala		
385	390	

<210> 255  
 <211> 314  
 <212> PRT  
 <213> Homo sapien  
  
 <400> 255

315

Met Ala Pro Pro Gln Val Leu Ala Phe Gly Leu Leu Leu Ala Ala Ala  
 1 5 10 15  
 Thr Ala Thr Phe Ala Ala Ala Gln Glu Cys Val Cys Glu Asn Tyr  
 20 25 30  
 Lys Leu Ala Val Asn Cys Phe Val Asn Asn Asn Arg Gln Cys Gln Cys  
 35 40 45  
 Thr Ser Val Gly Ala Gln Asn Thr Val Ile Cys Ser Lys Leu Ala Ala  
 50 55 60  
 Lys Cys Leu Val Met Lys Ala Glu Met Asn Gly Ser Lys Leu Gly Arg  
 65 70 75 80  
 Arg Ala Lys Pro Glu Gly Ala Leu Gln Asn Asn Asp Gly Leu Tyr Asp  
 85 90 95  
 Pro Asp Cys Asp Glu Ser Gly Leu Phe Lys Ala Lys Gln Cys Asn Gly  
 100 105 110  
 Thr Ser Thr Cys Trp Cys Val Asn Thr Ala Gly Val Arg Arg Thr Asp  
 115 120 125  
 Lys Asp Thr Glu Ile Thr Cys Ser Glu Arg Val Arg Thr Tyr Trp Ile  
 130 135 140  
 Ile Ile Glu Leu Lys His Lys Ala Arg Glu Lys Pro Tyr Asp Ser Lys  
 145 150 155 160  
 Ser Leu Arg Thr Ala Leu Gln Lys Glu Ile Thr Thr Arg Tyr Gln Leu  
 165 170 175  
 Asp Pro Lys Phe Ile Thr Ser Ile Leu Tyr Glu Asn Asn Val Ile Thr  
 180 185 190  
 Ile Asp Leu Val Gln Asn Ser Ser Gln Lys Thr Gln Asn Asp Val Asp  
 195 200 205  
 Ile Ala Asp Val Ala Tyr Tyr Phe Glu Lys Asp Val Lys Gly Glu Ser  
 210 215 220  
 Leu Phe His Ser Lys Lys Met Asp Leu Thr Val Asn Gly Glu Gln Leu  
 225 230 235 240

316

Asp Leu Asp Pro Gly Gln Thr Leu Ile Tyr Tyr Val Asp Glu Lys Ala  
 245 250 255

Pro Glu Phe Ser Met Gln Gly Leu Lys Ala Gly Val Ile Ala Val Ile  
 260 265 270

Val Val Val Val Ile Ala Val Val Ala Gly Ile Val Val Leu Val Ile  
 275 280 285

Ser Arg Lys Lys Arg Met Ala Lys Tyr Glu Lys Ala Glu Ile Lys Glu  
 290 295 300

Met Gly Glu Met His Arg Glu Leu Asn Ala  
 305 310

<210> 256  
 <211> 122  
 <212> PRT  
 <213> Homo sapien

<400> 256

Gln Asn Leu Thr Cys Ala Glu Asn Lys Met Arg Leu Ala Trp Leu Tyr  
 1 5 10 15

Leu Phe Phe Leu Phe Cys Phe Gly Phe Phe Phe Phe Phe Gly Leu Thr  
 20 25 30

Gln Asp Leu Lys Thr Gly Thr Val Lys Val Thr Ala Val Gly Trp Ser  
 35 40 45

Glu His Pro Pro Lys Phe Thr Met Trp Pro Arg Thr Leu Ile Ala His  
 50 55 60

Cys Cys Phe Phe Asn Ser His Ser Lys Tyr Glu Met Arg Cys Tyr Arg  
 65 70 75 80

Lys Ser Leu Ala Ile Leu Lys Ala Thr Pro Leu Leu Ser Lys Glu Asn  
 85 90 95

Gly Pro Val Leu Ser Gln Val His Thr Gly Glu Val Ile Ala Leu Leu  
 100 105 110

Ser Cys Lys Leu Cys Asn Ala Lys Phe Phe  
 115 120

<210> 257  
 <211> 48



317

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 257

Ala Leu Ser Ser Gly Arg Pro Gly Arg Tyr Ser Val Trp Ile Gly Gly  
 1 5 10 15

Ser Ile Leu Ala Ser Leu Ser Thr Phe Gln Gln Met Trp Ile Ser Lys  
 20 25 30

Gln Glu Tyr Asp Glu Ser Gly Pro Ser Ile Val His Arg Lys Cys Phe  
 35 40 45

&lt;210&gt; 258

&lt;211&gt; 596

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 258

Met Asn Arg Thr Trp Pro Arg Arg Ile Trp Gly Ser Ser Gln Asp Glu  
 1 5 10 15

Ala Glu Leu Ile Arg Glu Asp Ile Gln Gly Ala Leu His Asn Tyr Arg  
 20 25 30

Ser Gly Arg Gly Glu Arg Arg Ala Ala Ala Leu Arg Ala Thr Gln Glu  
 35 40 45

Glu Leu Gln Arg Asp Arg Ser Pro Ala Ala Glu Thr Pro Pro Leu Gln  
 50 55 60

Arg Arg Pro Ser Val Arg Ala Val Ile Ser Thr Val Glu Arg Gly Ala  
 65 70 75 80

Gly Arg Gly Arg Pro Gln Ala Lys Pro Ile Pro Glu Ala Glu Glu Ala  
 85 90 95

Gln Arg Pro Glu Pro Val Gly Thr Ser Ser Asn Ala Asp Ser Ala Ser  
 100 105 110

Pro Asp Leu Gly Pro Arg Gly Pro Asp Leu Ala Val Leu Gln Ala Glu  
 115 120 125

Arg Glu Val Asp Ile Leu Asn His Val Phe Asp Asp Val Glu Ser Phe  
 130 135 140

Val Ser Arg Leu Gln Lys Ser Ala Glu Ala Ala Arg Val Leu Glu His

318															
145				150				155				160			
Arg	Glu	Arg	Gly	Arg	Arg	Ser	Arg	Arg	Arg	Ala	Ala	Gly	Glu	Gly	Leu
				165					170					175	
Leu	Thr	Leu	Arg	Ala	Lys	Pro	Pro	Ser	Glu	Ala	Glu	Tyr	Thr	Asp	Val
			180					185					190		
Leu	Gln	Lys	Ile	Lys	Tyr	Ala	Phe	Ser	Leu	Leu	Ala	Arg	Leu	Arg	Gly
		195					200					205			
Asn	Ile	Ala	Asp	Pro	Ser	Ser	Pro	Glu	Leu	Leu	His	Phe	Leu	Phe	Gly
	210					215					220				
Pro	Leu	Gln	Met	Ile	Val	Asn	Thr	Ser	Gly	Gly	Pro	Glu	Phe	Ala	Ser
225					230					235					240
Ser	Val	Arg	Arg	Pro	His	Leu	Thr	Ser	Asp	Ala	Val	Ala	Leu	Leu	Arg
				245					250					255	
Asp	Asn	Val	Thr	Pro	Arg	Glu	Asn	Glu	Leu	Trp	Thr	Ser	Leu	Gly	Asp
			260					265					270		
Ser	Trp	Thr	Arg	Pro	Gly	Leu	Glu	Leu	Ser	Pro	Glu	Glu	Gly	Pro	Pro
		275					280					285			
Tyr	Arg	Pro	Glu	Phe	Phe	Ser	Gly	Trp	Glu	Pro	Pro	Val	Thr	Asp	Pro
	290					295					300				
Gln	Ser	Arg	Ala	Trp	Glu	Asp	Pro	Val	Glu	Lys	Gln	Leu	Gln	His	Glu
305					310					315					320
Arg	Arg	Arg	Arg	Gln	Gln	Ser	Ala	Pro	Gln	Val	Ala	Val	Asn	Gly	His
				325					330					335	
Arg	Asp	Leu	Glu	Pro	Glu	Ser	Glu	Pro	Gln	Leu	Glu	Ser	Glu	Thr	Ala
			340					345					350		
Gly	Lys	Trp	Val	Leu	Cys	Asn	Tyr	Asp	Phe	Gln	Ala	Arg	Asn	Ser	Ser
		355					360					365			
Glu	Leu	Ser	Val	Lys	Gln	Arg	Asp	Val	Leu	Glu	Val	Leu	Asp	Asp	Ser
	370					375					380				
Arg	Lys	Trp	Trp	Lys	Val	Arg	Asp	Pro	Ala	Gly	Gln	Glu	Gly	Tyr	Val
385					390					395					400

319

Pro Tyr Asn Ile Leu Thr Pro Tyr Pro Gly Pro Arg Leu His His Ser  
 405 410 415

Gln Ser Pro Ala Arg Ser Leu Asn Ser Thr Pro Pro Pro Pro Pro Ala  
 420 425 430

Pro Ala Pro Ala Pro Pro Pro Ala Leu Ala Arg Pro Arg Trp Asp Arg  
 435 440 445

Pro Arg Trp Asp Ser Cys Asp Ser Leu Asn Gly Leu Asp Pro Ser Glu  
 450 455 460

Lys Glu Lys Phe Ser Gln Met Leu Ile Val Asn Glu Glu Leu Gln Ala  
 465 470 475 480

Arg Leu Ala Gln Gly Arg Ser Gly Pro Ser Arg Ala Val Pro Gly Pro  
 485 490 495

Arg Ala Pro Glu Pro Gln Leu Ser Pro Gly Ser Asp Ala Ser Glu Val  
 500 505 510

Arg Ala Trp Leu Gln Ala Lys Gly Phe Ser Ser Gly Thr Val Asp Ala  
 515 520 525

Leu Gly Val Leu Thr Gly Ala Gln Leu Phe Ser Leu Gln Arg Glu Glu  
 530 535 540

Leu Arg Ala Val Ser Pro Glu Glu Gly Ala Arg Val Tyr Ser Gln Val  
 545 550 555 560

Thr Val Gln Arg Ser Leu Leu Glu Asp Lys Glu Lys Val Ser Glu Leu  
 565 570 575

Glu Ala Val Met Glu Lys Gln Lys Lys Lys Val Glu Gly Glu Val Glu  
 580 585 590

Met Glu Val Ile  
 595

<210> 259

<211> 408

<212> PRT

<213> Homo sapien

<400> 259

320

Asp Leu Phe Gln Met Ser Pro Leu Ser Pro Gly Ser Pro Leu Pro Pro  
 1 5 10 15

Leu Ala Arg Ala Asp Leu Thr Ala Ile Leu Thr Gly Cys Pro Pro Leu  
 20 25 30

Ser Ala Cys Leu Val Leu Ala Pro Arg Pro His Arg Arg Ala Arg Leu  
 35 40 45

Leu Pro Ser Glu Gly Leu Leu Thr Leu Arg Ala Lys Pro Pro Ser Glu  
 50 55 60

Ala Glu Tyr Thr Asp Val Leu Gln Lys Ile Lys Tyr Ala Phe Ser Leu  
 65 70 75 80

Leu Ala Arg Leu Arg Gly Asn Ile Ala Asp Pro Ser Ser Pro Glu Leu  
 85 90 95

Leu His Phe Leu Phe Gly Pro Leu Gln Met Ile Val Asn Thr Ser Gly  
 100 105 110

Gly Pro Glu Phe Ala Ser Ser Val Arg Arg Pro His Leu Thr Ser Asp  
 115 120 125

Ala Val Ala Leu Leu Arg Asp Asn Val Thr Pro Arg Glu Asn Glu Leu  
 130 135 140

Trp Thr Ser Leu Gly Asp Ser Trp Thr Arg Pro Gly Leu Glu Leu Ser  
 145 150 155 160

Pro Glu Glu Gly Pro Pro Tyr Arg Pro Glu Phe Phe Ser Gly Trp Glu  
 165 170 175

Pro Pro Val Thr Asp Pro Gln Ser Arg Ala Trp Glu Asp Pro Val Glu  
 180 185 190

Lys Gln Leu Gln His Glu Arg Arg Arg Arg Gln Gln Ser Ala Pro Gln  
 195 200 205

Val Ala Val Asn Gly His Arg Asp Leu Glu Pro Glu Ser Glu Pro Gln  
 210 215 220

Leu Glu Ser Glu Thr Ala Gly Lys Trp Val Leu Cys Asn Tyr Asp Phe  
 225 230 235 240

Gln Ala Arg Asn Ser Ser Glu Leu Ser Val Lys Gln Arg Asp Val Leu

321  
 245 250 255  
 Glu Val Leu Asp Asp Ser Arg Lys Trp Trp Lys Val Arg Asp Pro Ala  
 260 265 270  
 Gly Gln Glu Gly Tyr Val Pro Tyr Asn Ile Leu Thr Pro Tyr Pro Gly  
 275 280 285  
 Pro Arg Leu His His Ser Gln Ser Pro Ala Arg Ser Leu Asn Ser Thr  
 290 295 300  
 Pro Pro Pro Pro Pro Ala Pro Ala Pro Ala Pro Pro Pro Ala Leu Ala  
 305 310 315 320  
 Arg Pro Arg Trp Asp Arg Pro Arg Trp Asp Ser Cys Asp Ser Leu Asn  
 325 330 335  
 Gly Leu Asp Pro Ser Glu Lys Glu Lys Phe Ser Gln Met Leu Ile Val  
 340 345 350  
 Asn Glu Glu Leu Gln Ala Arg Leu Ala Gln Gly Arg Ser Gly Pro Ser  
 355 360 365  
 Arg Ala Val Pro Gly Pro Arg Ala Pro Glu Pro Gln Leu Ser Pro Gly  
 370 375 380  
 Ser Asp Ala Ser Glu Val Arg Ala Trp Leu Gln Ala Lys Gly Phe Ser  
 385 390 395 400  
 Ser Gly Arg Arg Ser Cys Gly Arg  
 405  
 <210> 260  
 <211> 470  
 <212> PRT  
 <213> Homo sapien  
 <400> 260  
 Met Ser Pro Leu Ser Pro Gly Ser Pro Leu Pro Pro Leu Ala Arg Ala  
 1 5 10 15  
 Asp Leu Thr Ala Ile Leu Thr Gly Cys Pro Pro Leu Ser Ala Cys Leu  
 20 25 30  
 Val Leu Ala Pro Arg Pro His Arg Arg Ala Arg Leu Leu Pro Ser Glu  
 35 40 45

Gly 50	Leu	Leu	Thr	Leu	Arg	Ala 55	Lys	Pro	Pro	Ser	Glu 60	Ala	Glu	Tyr	Thr
Asp 65	Val	Leu	Gln	Lys	Ile 70	Lys	Tyr	Ala	Phe	Ser 75	Leu	Leu	Ala	Arg	Leu 80
Arg	Gly	Asn	Ile	Ala 85	Asp	Pro	Ser	Ser	Pro 90	Glu	Leu	Leu	His	Phe 95	Leu
Phe	Gly	Pro	Leu 100	Gln	Met	Ile	Val	Asn 105	Thr	Ser	Gly	Gly	Pro 110	Glu	Phe
Ala	Ser	Ser 115	Val	Arg	Arg	Pro	His 120	Leu	Thr	Ser	Asp	Ala 125	Val	Ala	Leu
Leu	Arg 130	Asp	Asn	Val	Thr	Pro 135	Arg	Glu	Asn	Glu	Leu 140	Trp	Thr	Ser	Leu
Gly 145	Asp	Ser	Trp	Thr	Arg 150	Pro	Gly	Leu	Glu	Leu 155	Ser	Pro	Glu	Glu	Gly 160
Pro	Pro	Tyr	Arg	Pro 165	Glu	Phe	Phe	Ser	Gly 170	Trp	Glu	Pro	Pro	Val 175	Thr
Asp	Pro	Gln	Ser 180	Arg	Ala	Trp	Glu	Asp 185	Pro	Val	Glu	Lys	Gln 190	Leu	Gln
His	Glu	Arg 195	Arg	Arg	Arg	Gln	Gln 200	Ser	Ala	Pro	Gln	Val 205	Ala	Val	Asn
Gly	His 210	Arg	Asp	Leu	Glu	Pro 215	Glu	Ser	Glu	Pro	Gln 220	Leu	Glu	Ser	Glu
Thr 225	Ala	Gly	Lys	Trp	Val 230	Leu	Cys	Asn	Tyr	Asp 235	Phe	Gln	Ala	Arg	Asn 240
Ser	Ser	Glu	Leu	Ser 245	Val	Lys	Gln	Arg	Asp 250	Val	Leu	Glu	Val	Leu 255	Asp
Asp	Ser	Arg	Lys 260	Trp	Trp	Lys	Val	Arg 265	Asp	Pro	Ala	Gly	Gln 270	Glu	Gly
Tyr	Val	Pro 275	Tyr	Asn	Ile	Leu	Thr 280	Pro	Tyr	Pro	Gly	Pro 285	Arg	Leu	His

323

His Ser Gln Ser Pro Ala Arg Ser Leu Asn Ser Thr Pro Pro Pro Pro  
 290 295 300

Pro Ala Pro Ala Pro Ala Pro Pro Pro Ala Leu Ala Arg Pro Arg Trp  
 305 310 315 320

Asp Arg Pro Arg Trp Asp Ser Cys Asp Ser Leu Asn Gly Leu Asp Pro  
 325 330 335

Ser Glu Lys Glu Lys Phe Ser Gln Met Leu Ile Val Asn Glu Glu Leu  
 340 345 350

Gln Ala Arg Leu Ala Gln Gly Arg Ser Gly Pro Ser Arg Ala Val Pro  
 355 360 365

Gly Pro Arg Ala Pro Glu Pro Gln Leu Ser Pro Gly Ser Asp Ala Ser  
 370 375 380

Glu Val Arg Ala Trp Leu Gln Ala Lys Gly Phe Ser Ser Gly Thr Val  
 385 390 395 400

Asp Ala Leu Gly Val Leu Thr Gly Ala Gln Leu Phe Ser Leu Gln Lys  
 405 410 415

Glu Glu Leu Arg Ala Val Ser Pro Glu Glu Gly Ala Arg Val Tyr Ser  
 420 425 430

Gln Val Thr Val Gln Arg Ser Leu Leu Glu Asp Lys Glu Lys Val Ser  
 435 440 445

Glu Leu Glu Ala Val Met Glu Lys Gln Lys Lys Lys Val Glu Gly Glu  
 450 455 460

Val Glu Met Glu Val Ile  
 465 470

&lt;210&gt; 261

&lt;211&gt; 474

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 261

Asp Leu Phe Gln Met Ser Pro Leu Ser Pro Gly Ser Pro Leu Pro Pro  
 1 5 10 15

Leu Ala Arg Ala Asp Leu Thr Ala Ile Leu Thr Gly Cys Pro Pro Leu  
 20 25 30

324

Ser Ala Cys Leu Val Leu Ala Pro Arg Pro His Arg Arg Ala Arg Leu  
 35 40 45

Leu Pro Ser Glu Gly Leu Leu Thr Leu Arg Ala Lys Pro Pro Ser Glu  
 50 55 60

Ala Glu Tyr Thr Asp Val Leu Gln Lys Ile Lys Tyr Ala Phe Ser Leu  
 65 70 75 80

Leu Ala Arg Leu Arg Gly Asn Ile Ala Asp Pro Ser Ser Pro Glu Leu  
 85 90 95

Leu His Phe Leu Phe Gly Pro Leu Gln Met Ile Val Asn Thr Ser Gly  
 100 105 110

Gly Pro Glu Phe Ala Ser Ser Val Arg Arg Pro His Leu Thr Ser Asp  
 115 120 125

Ala Val Ala Leu Leu Arg Asp Asn Val Thr Pro Arg Glu Asn Glu Leu  
 130 135 140

Trp Thr Ser Leu Gly Asp Ser Trp Thr Arg Pro Gly Leu Glu Leu Ser  
 145 150 155 160

Pro Glu Glu Gly Pro Pro Tyr Arg Pro Glu Phe Phe Ser Gly Trp Glu  
 165 170 175

Pro Pro Val Thr Asp Pro Gln Ser Arg Ala Trp Glu Asp Pro Val Glu  
 180 185 190

Lys Gln Leu Gln His Glu Arg Arg Arg Arg Gln Gln Ser Ala Pro Gln  
 195 200 205

Val Ala Val Asn Gly His Arg Asp Leu Glu Pro Glu Ser Glu Pro Gln  
 210 215 220

Leu Glu Ser Glu Thr Ala Gly Lys Trp Val Leu Cys Asn Tyr Asp Phe  
 225 230 235 240

Gln Ala Arg Asn Ser Ser Glu Leu Ser Val Lys Gln Arg Asp Val Leu  
 245 250 255

Glu Val Leu Asp Asp Ser Arg Lys Trp Trp Lys Val Arg Asp Pro Ala  
 260 265 270



325

Gly Gln Glu Gly Tyr Val Pro Tyr Asn Ile Leu Thr Pro Tyr Pro Gly  
 275 280 285

Pro Arg Leu His His Ser Gln Ser Pro Ala Arg Ser Leu Asn Ser Thr  
 290 295 300

Pro Pro Pro Pro Pro Ala Pro Ala Pro Ala Pro Pro Pro Ala Leu Ala  
 305 310 315 320

Arg Pro Arg Trp Asp Arg Pro Arg Trp Asp Ser Cys Asp Ser Leu Asn  
 325 330 335

Gly Leu Asp Pro Ser Glu Lys Glu Lys Phe Ser Gln Met Leu Ile Val  
 340 345 350

Asn Glu Glu Leu Gln Ala Arg Leu Ala Gln Gly Arg Ser Gly Pro Ser  
 355 360 365

Arg Ala Val Pro Gly Pro Arg Ala Pro Glu Pro Gln Leu Ser Pro Gly  
 370 375 380

Ser Asp Ala Ser Glu Val Arg Ala Trp Leu Gln Ala Lys Gly Phe Ser  
 385 390 395 400

Ser Gly Thr Val Asp Ala Leu Gly Val Leu Thr Gly Ala Gln Leu Phe  
 405 410 415

Ser Leu Gln Lys Glu Glu Leu Arg Ala Val Ser Pro Glu Glu Gly Ala  
 420 425 430

Arg Val Tyr Ser Gln Val Thr Val Gln Arg Ser Leu Leu Glu Asp Lys  
 435 440 445

Glu Lys Val Ser Glu Leu Glu Ala Val Met Glu Lys Gln Lys Lys Lys  
 450 455 460

Val Glu Gly Glu Val Glu Met Glu Val Ile  
 465 470

&lt;210&gt; 262

&lt;211&gt; 474

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 262

Asp Leu Phe Gln Met Ser Pro Leu Ser Pro Gly Ser Pro Leu Pro Pro

326															
1	5				10				15						
Leu	Ala	Arg	Ala	Asp	Leu	Thr	Ala	Ile	Leu	Thr	Gly	Cys	Pro	Pro	Leu
			20					25					30		
Ser	Ala	Cys	Leu	Val	Leu	Ala	Pro	Arg	Pro	His	Arg	Arg	Ala	Arg	Leu
		35					40					45			
Leu	Pro	Ser	Glu	Gly	Leu	Leu	Thr	Leu	Arg	Ala	Lys	Pro	Pro	Ser	Glu
	50					55					60				
Ala	Glu	Tyr	Thr	Asp	Val	Leu	Gln	Lys	Ile	Lys	Tyr	Ala	Phe	Ser	Leu
65					70					75					80
Leu	Ala	Arg	Leu	Arg	Gly	Asn	Ile	Ala	Asp	Pro	Ser	Ser	Pro	Glu	Leu
				85					90					95	
Leu	His	Phe	Leu	Phe	Gly	Pro	Leu	Gln	Met	Ile	Val	Asn	Thr	Ser	Gly
			100					105					110		
Gly	Pro	Glu	Phe	Ala	Ser	Ser	Val	Arg	Arg	Pro	His	Leu	Thr	Ser	Asp
		115					120					125			
Ala	Val	Ala	Leu	Leu	Arg	Asp	Asn	Val	Thr	Pro	Arg	Glu	Asn	Glu	Leu
	130					135					140				
Trp	Thr	Ser	Leu	Gly	Asp	Ser	Trp	Thr	Arg	Pro	Gly	Leu	Glu	Leu	Ser
145					150					155					160
Pro	Glu	Glu	Gly	Pro	Pro	Tyr	Arg	Pro	Glu	Phe	Phe	Ser	Gly	Trp	Glu
				165					170					175	
Pro	Pro	Val	Thr	Asp	Pro	Gln	Ser	Arg	Ala	Trp	Glu	Asp	Pro	Val	Glu
			180					185					190		
Lys	Gln	Leu	Gln	His	Glu	Arg	Arg	Arg	Arg	Gln	Gln	Ser	Ala	Pro	Gln
		195					200					205			
Val	Ala	Val	Asn	Gly	His	Arg	Asp	Leu	Glu	Pro	Glu	Ser	Glu	Pro	Gln
	210					215					220				
Leu	Glu	Ser	Glu	Thr	Ala	Gly	Lys	Trp	Val	Leu	Cys	Asn	Tyr	Asp	Phe
225					230					235					240
Gln	Ala	Arg	Asn	Ser	Ser	Glu	Leu	Ser	Val	Lys	Gln	Arg	Asp	Val	Leu
				245					250					255	

327

Glu Val Leu Asp Asp Ser Arg Lys Trp Trp Lys Val Arg Asp Pro Ala  
 260 265 270

Gly Gln Glu Gly Tyr Val Pro Tyr Asn Ile Leu Thr Pro Tyr Pro Gly  
 275 280 285

Pro Arg Leu His His Ser Gln Ser Pro Ala Arg Ser Leu Asn Ser Thr  
 290 295 300

Pro Pro Pro Pro Pro Ala Pro Ala Pro Ala Pro Pro Pro Ala Leu Ala  
 305 310 315 320

Arg Pro Arg Trp Asp Arg Pro Arg Trp Asp Ser Cys Asp Ser Leu Asn  
 325 330 335

Gly Leu Asp Pro Ser Glu Lys Glu Lys Phe Ser Gln Met Leu Ile Val  
 340 345 350

Asn Glu Glu Leu Gln Ala Arg Leu Ala Gln Gly Arg Ser Gly Pro Ser  
 355 360 365

Arg Ala Val Pro Gly Pro Arg Ala Pro Glu Pro Gln Leu Ser Pro Gly  
 370 375 380

Ser Asp Ala Ser Glu Val Arg Ala Trp Leu Gln Ala Lys Gly Phe Ser  
 385 390 395 400

Ser Gly Thr Val Asp Ala Leu Gly Val Leu Thr Gly Ala Gln Leu Phe  
 405 410 415

Ser Leu Gln Lys Glu Glu Leu Arg Ala Val Ser Pro Glu Glu Gly Ala  
 420 425 430

Arg Val Tyr Ser Gln Val Thr Val Gln Arg Ser Leu Leu Glu Asp Lys  
 435 440 445

Glu Lys Val Ser Glu Leu Glu Ala Val Met Glu Lys Gln Lys Lys Lys  
 450 455 460

Val Glu Gly Glu Val Glu Met Glu Val Ile  
 465 470

&lt;210&gt; 263

&lt;211&gt; 474

&lt;212&gt; PRT

328

&lt;213&gt; Homo sapien

&lt;400&gt; 263

Asp Leu Phe Gln Met Ser Pro Leu Ser Pro Gly Ser Pro Leu Pro Pro  
 1 5 10 15

Leu Ala Arg Ala Asp Leu Thr Ala Ile Leu Thr Gly Cys Pro Pro Leu  
 20 25 30

Ser Ala Cys Leu Val Leu Ala Pro Arg Pro His Arg Arg Ala Arg Leu  
 35 40 45

Leu Pro Ser Glu Gly Leu Leu Thr Leu Arg Ala Lys Pro Pro Ser Glu  
 50 55 60

Ala Glu Tyr Thr Asp Val Leu Gln Lys Ile Lys Tyr Ala Phe Ser Leu  
 65 70 75 80

Leu Ala Arg Leu Arg Gly Asn Ile Ala Asp Pro Ser Ser Pro Glu Leu  
 85 90 95

Leu His Phe Leu Phe Gly Pro Leu Gln Met Ile Val Asn Thr Ser Gly  
 100 105 110

Gly Pro Glu Phe Ala Ser Ser Val Arg Arg Pro His Leu Thr Ser Asp  
 115 120 125

Ala Val Ala Leu Leu Arg Asp Asn Val Thr Pro Arg Glu Asn Glu Leu  
 130 135 140

Trp Thr Ser Leu Gly Asp Ser Trp Thr Arg Pro Gly Leu Glu Leu Ser  
 145 150 155 160

Pro Glu Glu Gly Pro Pro Tyr Arg Pro Glu Phe Phe Ser Gly Trp Glu  
 165 170 175

Pro Pro Val Thr Asp Pro Gln Ser Arg Ala Trp Glu Asp Pro Val Glu  
 180 185 190

Lys Gln Leu Gln His Glu Arg Arg Arg Arg Gln Gln Ser Ala Pro Gln  
 195 200 205

Val Ala Val Asn Gly His Arg Asp Leu Glu Pro Glu Ser Glu Pro Gln  
 210 215 220

Leu Glu Ser Glu Thr Ala Gly Lys Trp Val Leu Cys Asn Tyr Asp Phe

[illegible]

330

<210> 264  
 <211> 470  
 <212> PRT  
 <213> Homo sapien

<400> 264

Met Ser Pro Leu Ser Pro Gly Ser Pro Leu Pro Pro Leu Ala Arg Ala  
 1 5 10 15

Asp Leu Thr Ala Ile Leu Thr Gly Cys Pro Pro Leu Ser Ala Cys Leu  
 20 25 30

Val Leu Ala Pro Arg Pro His Arg Arg Ala Arg Leu Leu Pro Ser Glu  
 35 40 45

Gly Leu Leu Thr Leu Arg Ala Lys Pro Pro Ser Glu Ala Glu Tyr Thr  
 50 55 60

Asp Val Leu Gln Lys Ile Lys Tyr Ala Phe Ser Leu Leu Ala Arg Leu  
 65 70 75 80

Arg Gly Asn Ile Ala Asp Pro Ser Ser Pro Glu Leu Leu His Phe Leu  
 85 90 95

Phe Gly Pro Leu Gln Met Ile Val Asn Thr Ser Gly Gly Pro Glu Phe  
 100 105 110

Ala Ser Ser Val Arg Arg Pro His Leu Thr Ser Asp Ala Val Ala Leu  
 115 120 125

Leu Arg Asp Asn Val Thr Pro Arg Glu Asn Glu Leu Trp Thr Ser Leu  
 130 135 140

Gly Asp Ser Trp Thr Arg Pro Gly Leu Glu Leu Ser Pro Glu Glu Gly  
 145 150 155 160

Pro Pro Tyr Arg Pro Glu Phe Phe Ser Gly Trp Glu Pro Pro Val Thr  
 165 170 175

Asp Pro Gln Ser Arg Ala Trp Glu Asp Pro Val Glu Lys Gln Leu Gln  
 180 185 190

His Glu Arg Arg Arg Arg Gln Gln Ser Ala Pro Gln Val Ala Val Asn  
 195 200 205

Gly 210	His	Arg	Asp	Leu	Glu	Pro 215	Glu	Ser	Glu	Pro 220	Gln	Leu	Glu	Ser	Glu
Thr 225	Ala	Gly	Lys	Trp	Val 230	Leu	Cys	Asn	Tyr	Asp 235	Phe	Gln	Ala	Arg	Asn 240
Ser	Ser	Glu	Leu	Ser 245	Val	Lys	Gln	Arg	Asp 250	Val	Leu	Glu	Val	Leu	Asp
Asp	Ser	Arg	Lys 260	Trp	Trp	Lys	Val	Arg 265	Asp	Pro	Ala	Gly	Gln 270	Glu	Gly
Tyr	Val 275	Pro	Tyr	Asn	Ile	Leu	Thr 280	Pro	Tyr	Pro	Gly	Pro 285	Arg	Leu	His
His 290	Ser	Gln	Ser	Pro	Ala	Arg 295	Ser	Leu	Asn	Ser	Thr 300	Pro	Pro	Pro	Pro
Pro 305	Ala	Pro	Ala	Pro	Ala 310	Pro	Pro	Pro	Ala	Leu 315	Ala	Arg	Pro	Arg	Trp 320
Asp	Arg	Pro	Arg	Trp 325	Asp	Ser	Cys	Asp	Ser 330	Leu	Asn	Gly	Leu	Asp 335	Pro
Ser	Glu	Lys	Glu 340	Lys	Phe	Ser	Gln	Met 345	Leu	Ile	Val	Asn	Glu 350	Glu	Leu
Gln	Ala 355	Arg	Leu	Ala	Gln	Gly	Arg 360	Ser	Gly	Pro	Ser	Arg 365	Ala	Val	Pro
Gly 370	Pro	Arg	Ala	Pro	Glu	Pro 375	Gln	Leu	Ser	Pro	Gly 380	Ser	Asp	Ala	Ser
Glu 385	Val	Arg	Ala	Trp	Leu 390	Gln	Ala	Lys	Gly	Phe 395	Ser	Ser	Gly	Thr	Val 400
Asp	Ala	Leu	Gly	Val 405	Leu	Thr	Gly	Ala	Gln 410	Leu	Phe	Ser	Leu	Gln 415	Lys
Glu	Glu	Leu	Arg 420	Ala	Val	Ser	Pro	Glu 425	Glu	Gly	Ala	Arg	Val 430	Tyr	Ser
Gln	Val 435	Thr	Val	Gln	Arg	Ser	Leu 440	Leu	Glu	Asp	Lys	Glu 445	Lys	Val	Ser
Glu	Leu	Glu	Ala	Val	Met	Glu	Lys	Gln	Lys	Lys	Lys	Val	Glu	Gly	Gln

332

450

455

460

Val Glu Met Glu Val Ile  
465 470

<210> 265  
<211> 502  
<212> PRT  
<213> Homo sapien

<400> 265

Met Ser Pro Leu Ser Pro Gly Ser Pro Leu Pro Pro Leu Ala Arg Ala  
1 5 10 15

Asp Leu Thr Ala Ile Leu Thr Gly Cys Pro Pro Leu Ser Ala Cys Leu  
20 25 30

Val Leu Ala Pro Arg Pro His Arg Arg Ala Arg Leu Leu Pro Ser Glu  
35 40 45

Gly Leu Leu Thr Leu Arg Ala Lys Pro Pro Ser Glu Ala Glu Tyr Thr  
50 55 60

Asp Val Leu Gln Lys Ile Lys Tyr Ala Phe Ser Leu Leu Ala Arg Leu  
65 70 75 80

Arg Gly Asn Ile Ala Asp Pro Ser Ser Pro Glu Leu Leu His Phe Leu  
85 90 95

Phe Gly Pro Leu Gln Met Ile Val Asn Thr Ser Gly Gly Pro Glu Phe  
100 105 110

Ala Ser Ser Val Arg Arg Pro His Leu Thr Ser Asp Ala Val Ala Leu  
115 120 125

Leu Arg Asp Asn Val Thr Pro Arg Glu Asn Glu Leu Trp Thr Ser Leu  
130 135 140

Gly Asp Ser Trp Thr Arg Pro Gly Leu Glu Leu Ser Pro Glu Glu Gly  
145 150 155 160

Pro Pro Tyr Arg Pro Glu Phe Phe Ser Gly Trp Glu Pro Pro Val Thr  
165 170 175

Asp Pro Gln Ser Arg Ala Trp Glu Asp Pro Val Glu Lys Gln Leu Gln  
180 185 190



333

His Glu Arg Arg Arg Arg Gln Val Thr Gln Ala Thr Gln Gln Gly Arg  
 195 200 205

Gly Trp Glu Val Arg Gly Arg Gly Arg Ser Ala Trp Pro Arg Leu Thr  
 210 215 220

Arg Leu Ser Tyr Phe Leu Gln Gln Ser Ala Pro Gln Val Ala Val Asn  
 225 230 235 240

Gly His Arg Asp Leu Glu Pro Glu Ser Glu Pro Gln Leu Glu Ser Glu  
 245 250 255

Thr Ala Gly Lys Trp Val Leu Cys Asn Tyr Asp Phe Gln Ala Arg Asn  
 260 265 270

Ser Ser Glu Leu Ser Val Lys Gln Arg Asp Val Leu Glu Val Leu Asp  
 275 280 285

Asp Ser Arg Lys Trp Trp Lys Val Arg Asp Pro Ala Gly Gln Glu Gly  
 290 295 300

Tyr Val Pro Tyr Asn Ile Leu Thr Pro Tyr Pro Gly Pro Arg Leu His  
 305 310 315 320

His Ser Gln Ser Pro Ala Arg Ser Leu Asn Ser Thr Pro Pro Pro Pro  
 325 330 335

Pro Ala Pro Ala Pro Ala Pro Pro Pro Ala Leu Ala Arg Pro Arg Trp  
 340 345 350

Asp Arg Pro Arg Trp Asp Ser Cys Asp Ser Leu Asn Gly Leu Asp Pro  
 355 360 365

Ser Glu Lys Glu Lys Phe Ser Gln Met Leu Ile Val Asn Glu Glu Leu  
 370 375 380

Gln Ala Arg Leu Ala Gln Gly Arg Ser Gly Pro Ser Arg Ala Val Pro  
 385 390 395 400

Gly Pro Arg Ala Pro Glu Pro Gln Leu Ser Pro Gly Ser Asp Ala Ser  
 405 410 415

Glu Val Arg Ala Trp Leu Gln Ala Lys Gly Phe Ser Ser Gly Thr Val  
 420 425 430

334

Asp Ala Leu Gly Val Leu Thr Gly Ala Gln Leu Phe Ser Leu Gln Lys  
 435 440 445

Glu Glu Leu Arg Ala Val Ser Pro Glu Glu Gly Ala Arg Val Tyr Ser  
 450 455 460

Gln Val Thr Val Gln Arg Ser Leu Leu Glu Asp Lys Glu Lys Val Ser  
 465 470 475 480

Glu Leu Glu Ala Val Met Glu Lys Gln Lys Lys Lys Val Glu Gly Glu  
 485 490 495

Val Glu Met Glu Val Ile  
 500

<210> 266  
 <211> 548  
 <212> PRT  
 <213> Homo sapien

<400> 266

Met Gly Arg Lys Ala Ile Val Leu Ala Ile Ala Asn Thr Ser Leu Ala  
 1 5 10 15

Phe Pro Leu Cys Gln His Leu Val Thr Phe Cys Leu Gly Glu Asp Asp  
 20 25 30

Gly Val His Thr Val Glu Asp Ala Ser Arg Lys Leu Ala Val Met Asp  
 35 40 45

Ser Gln Gly Arg Val Trp Ala Gln Glu Met Leu Leu Arg Val Ser Pro  
 50 55 60

Asp His Val Thr Leu Leu Asp Pro Ala Ser Lys Glu Glu Leu Glu Ser  
 65 70 75 80

Tyr Pro Leu Gly Ala Ile Val Arg Cys Asp Ala Val Met Pro Pro Gly  
 85 90 95

Arg Ser Arg Ser Leu Leu Leu Leu Val Cys Gln Glu Pro Glu Arg Ala  
 100 105 110

Gln Pro Asp Val His Phe Phe Gln Gly Leu Arg Leu Gly Ala Glu Leu  
 115 120 125

Ile Arg Glu Asp Ile Gln Gly Ala Leu His Asn Tyr Arg Ser Gly Arg  
 130 135 140

335

Gly Glu Arg Arg Ala Ala Ala Leu Arg Ala Thr Gln Glu Glu Leu Gln  
 145 150 155 160

Arg Asp Arg Ser Pro Ala Ala Glu Thr Pro Pro Leu Gln Arg Arg Pro  
 165 170 175

Ser Val Arg Ala Val Ile Ser Thr Val Glu Arg Gly Ala Gly Arg Gly  
 180 185 190

Arg Pro Gln Ala Lys Pro Ile Pro Glu Ala Glu Glu Ala Gln Arg Pro  
 195 200 205

Glu Pro Val Gly Thr Ser Ser Asn Ala Asp Ser Ala Ser Pro Asp Leu  
 210 215 220

Gly Pro Arg Gly Pro Asp Leu Ala Val Leu Gln Ala Glu Arg Glu Val  
 225 230 235 240

Asp Ile Leu Asn His Val Phe Asp Asp Val Glu Ser Phe Val Ser Arg  
 245 250 255

Leu Gln Lys Ser Ala Glu Ala Ala Arg Val Leu Glu His Arg Glu Arg  
 260 265 270

Gly Arg Arg Ser Arg Arg Arg Ala Ala Gly Glu Gly Leu Leu Thr Leu  
 275 280 285

Arg Ala Lys Pro Pro Ser Glu Ala Glu Tyr Thr Asp Val Leu Gln Lys  
 290 295 300

Ile Lys Tyr Ala Phe Ser Leu Leu Ala Arg Leu Arg Gly Asn Ile Ala  
 305 310 315 320

Asp Pro Ser Ser Pro Glu Leu Leu His Phe Leu Phe Gly Pro Leu Gln  
 325 330 335

Met Ile Val Asn Thr Ser Gly Gly Pro Glu Phe Ala Ser Ser Val Arg  
 340 345 350

Arg Pro His Leu Thr Ser Asp Ala Val Ala Leu Leu Arg Asp Asn Val  
 355 360 365

Thr Pro Arg Glu Asn Glu Leu Trp Thr Ser Leu Gly Asp Ser Trp Thr  
 370 375 380

336

Arg Pro Gly Leu Glu Leu Ser Pro Glu Glu Gly Pro Pro Tyr Arg Pro  
385 390 395 400

Glu Phe Phe Ser Gly Trp Glu Pro Pro Val Thr Asp Pro Gln Ser Arg  
405 410 415

Ala Trp Glu Asp Pro Val Glu Lys Gln Leu Gln His Glu Arg Arg Arg  
420 425 430

Arg Gln Val Thr Gln Ala Thr Gln Gln Gly Arg Gly Trp Glu Val Arg  
435 440 445

Gly Arg Gly Arg Ser Ala Trp Pro Arg Leu Thr Arg Leu Ser Tyr Phe  
450 455 460

Leu Gln Gln Ser Ala Pro Gln Val Ala Val Asn Gly His Arg Asp Leu  
465 470 475 480

Glu Pro Glu Ser Glu Pro Gln Leu Glu Ser Glu Thr Ala Gly Lys Trp  
485 490 495

Val Leu Cys Asn Tyr Asp Phe Gln Ala Arg Asn Ser Ser Glu Leu Ser  
500 505 510

Val Lys Gln Arg Asp Val Leu Glu Asp Lys Glu Lys Val Ser Glu Leu  
515 520 525

Glu Ala Val Met Glu Lys Gln Lys Lys Lys Val Glu Gly Glu Val Glu  
530 535 540

Met Glu Val Ile  
545

<210> 267

<211> 277.

<212> PRT

<213> Homo sapien

<400> 267

Met Gly Leu Ala Ala Ser Leu Ser Pro Thr Leu Pro Leu Leu Ser  
1 5 10 15

His Arg Asp Leu Glu Pro Glu Ser Glu Pro Gln Leu Glu Ser Glu Thr  
20 25 30

Ala Gly Lys Trp Val Leu Cys Asn Tyr Asp Phe Gln Ala Arg Asn Ser

337

35

40

45

Ser Glu Leu Ser Val Lys Gln Arg Asp Val Leu Glu Val Leu Asp Asp  
 50 55 60

Ser Arg Lys Trp Trp Lys Val Arg Asp Pro Ala Gly Gln Glu Gly Tyr  
 65 70 75 80

Val Pro Tyr Asn Ile Leu Thr Pro Tyr Pro Gly Pro Arg Leu His His  
 85 90 95

Ser Gln Ser Pro Ala Arg Ser Leu Asn Ser Thr Pro Pro Pro Pro Pro  
 100 105 110

Ala Pro Ala Pro Ala Pro Pro Pro Ala Leu Ala Arg Pro Arg Trp Asp  
 115 120 125

Arg Pro Arg Trp Asp Ser Cys Asp Ser Leu Asn Gly Leu Asp Pro Ser  
 130 135 140

Glu Lys Glu Lys Phe Ser Gln Met Leu Ile Val Asn Glu Glu Leu Gln  
 145 150 155 160

Ala Arg Leu Ala Gln Gly Arg Ser Gly Pro Ser Arg Ala Val Pro Gly  
 165 170 175

Pro Arg Ala Pro Glu Pro Gln Leu Ser Pro Gly Ser Asp Ala Ser Glu  
 180 185 190

Val Arg Ala Trp Leu Gln Ala Lys Gly Phe Ser Ser Gly Thr Val Asp  
 195 200 205

Ala Leu Gly Val Leu Thr Gly Ala Gln Leu Phe Ser Leu Gln Lys Glu  
 210 215 220

Glu Leu Arg Ala Val Ser Pro Glu Glu Gly Ala Arg Val Tyr Ser Gln  
 225 230 235 240

Val Thr Val Gln Arg Ser Leu Leu Glu Asp Lys Glu Lys Val Ser Glu  
 245 250 255

Leu Glu Ala Val Met Glu Lys Gln Lys Lys Lys Val Glu Gly Glu Val  
 260 265 270

Glu Met Glu Val Ile  
 275

338

<210> 268  
 <211> 282  
 <212> PRT  
 <213> Homo sapien

<400> 268

Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile  
 1 5 10 15

Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly Ile Ser  
 20 25 30

Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala Gly Asn Ile  
 35 40 45

Gly Glu Asp Gly Ile Gln Ser Cys Thr Phe Glu Pro Asp Ile Lys Leu  
 50 55 60

Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly Val Leu Gly Leu Val  
 65 70 75 80

His Glu Phe Lys Glu Gly Lys Asp Glu Leu Ser Glu Gln Asp Glu Met  
 85 90 95

Phe Arg Gly Arg Thr Ala Val Phe Ala Asp Gln Val Ile Val Gly Asn  
 100 105 110

Ala Ser Leu Arg Leu Lys Asn Val Gln Leu Thr Asp Ala Gly Thr Tyr  
 115 120 125

Lys Cys Tyr Ile Ile Thr Ser Lys Gly Lys Gly Asn Ala Asn Leu Glu  
 130 135 140

Tyr Lys Thr Gly Ala Phe Ser Met Pro Glu Val Asn Val Asp Tyr Asn  
 145 150 155 160

Ala Ser Ser Glu Thr Leu Arg Cys Glu Ala Pro Arg Trp Phe Pro Gln  
 165 170 175

Pro Thr Val Val Trp Ala Ser Gln Val Asp Gln Gly Ala Asn Phe Ser  
 180 185 190

Glu Val Ser Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val Thr Met  
 195 200 205

339

Lys Val Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr Tyr Ser  
 210 215 220

Cys Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile Lys Val  
 225 230 235 240

Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu Asn Ser  
 245 250 255

Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp Ala Leu  
 260 265 270

Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys  
 275 280

<210> 269  
 <211> 59  
 <212> PRT  
 <213> Homo sapien

<400> 269

Met Ala Ser Leu Gly Gln Ile Leu Phe Trp Ser Ile Ile Ser Ile Ile  
 1 5 10 15

Ile Ile Leu Ala Gly Ala Ile Ala Leu Ile Ile Gly Phe Gly Ile Ser  
 20 25 30

Glu Val Ser Val Trp Leu Ser Ala Met Lys Gly Leu Val Val Glu Val  
 35 40 45

Pro Arg Leu Pro Leu Ala Leu Ile Phe Ala Ser  
 50 55

<210> 270  
 <211> 252  
 <212> PRT  
 <213> Homo sapien

<400> 270

Thr Ala Gly Arg His Ser Ile Thr Val Thr Thr Val Ala Ser Ala Gly  
 1 5 10 15

Asn Ile Gly Glu Asp Gly Ile Leu Ser Cys Thr Phe Glu Pro Asp Ile  
 20 25 30

Lys Leu Ser Asp Ile Val Ile Gln Trp Leu Lys Glu Gly Val Leu Gly  
 35 40 45

340

Leu Val His Glu Phe Lys Glu Gly Lys Asp Glu Leu Ser Glu Gln Asp  
 50 55 60

Glu Met Phe Arg Gly Arg Thr Ala Val Phe Ala Asp Gln Val Ile Val  
 65 70 75 80

Gly Asn Ala Ser Leu Arg Leu Lys Asn Val Gln Leu Thr Asp Ala Gly  
 85 90 95

Thr Tyr Lys Cys Tyr Ile Ile Thr Ser Lys Gly Lys Gly Asn Ala Asn  
 100 105 110

Leu Glu Tyr Lys Thr Gly Ala Phe Ser Met Pro Glu Val Asn Val Asp  
 115 120 125

Tyr Asn Ala Ser Ser Glu Thr Leu Arg Cys Glu Ala Pro Arg Trp Phe  
 130 135 140

Pro Gln Pro Thr Val Val Trp Ala Ser Gln Val Asp Gln Gly Ala Asn  
 145 150 155 160

Phe Ser Glu Val Ser Asn Thr Ser Phe Glu Leu Asn Ser Glu Asn Val  
 165 170 175

Thr Met Lys Val Val Ser Val Leu Tyr Asn Val Thr Ile Asn Asn Thr  
 180 185 190

Tyr Ser Cys Met Ile Glu Asn Asp Ile Ala Lys Ala Thr Gly Asp Ile  
 195 200 205

Lys Val Thr Glu Ser Glu Ile Lys Arg Arg Ser His Leu Gln Leu Leu  
 210 215 220

Asn Ser Lys Ala Ser Leu Cys Val Ser Ser Phe Phe Ala Ile Ser Trp  
 225 230 235 240

Ala Leu Leu Pro Leu Ser Pro Tyr Leu Met Leu Lys  
 245 250

<210> 271

<211> 155

<212> PRT

<213> Homo sapien

<400> 271

Gly Arg Gly Pro Pro Gly Glu Leu Cys His Glu Cys Trp Gln Gly Pro



341

1                      5                      10                      15  
 Arg Leu Leu Gln Glu Gly Arg Cys Gly His Cys Ala Asp Arg Met Ala  
                          20                                      25                                      30  
 Pro Trp Leu Arg Leu His Gln His His Ala Cys Cys Ser Cys Ala Val  
                          35                                      40                                      45  
 Met Asp Pro Arg Ala Pro Pro Pro Ala Pro Val Pro Pro Pro Ser Pro  
                          50                                      55                                      60  
 Ser Pro Ser Ile Arg Pro Ala Thr Leu Val Glu Leu Thr Leu Gly Cys  
                          65                                      70                                      75                                      80  
 Asn Val Ala Leu Val Gly Trp Asp Thr Arg Glu Glu Asp Gln Arg Leu  
    85                                      90                                      95  
 Thr Glu Thr Trp Leu Cys Leu Gln Pro Ala Leu Val Gly Gln Pro Arg  
    100                                      105                                      110  
 Ala Trp Leu Pro Ile Met Trp Pro His Pro Ile Lys Gly Arg Arg Arg  
    115                                      120                                      125  
 Asn Ala Gly Leu Glu Ala Pro Gly Ala Arg Trp Gln Glu Gly Asp Ser  
    130                                      135                                      140  
 Phe Leu Ser Cys Val Tyr Ser Val Gln Phe Leu  
    145                                      150                                      155  
  
 <210> 272  
 <211> 107  
 <212> PRT  
 <213> Homo sapien  
  
 <400> 272  
 Met Val Ser Ser Val Cys Pro Pro Ser His Leu Arg Ser Ala His Gln  
    1                                      5                                      10                                      15  
 Val Ala Arg Tyr Arg Pro Arg Ala Pro Ile Ile Ala Val Thr Arg Asn  
    20                                      25                                      30  
 Pro Gln Thr Ala Arg Gln Ala His Leu Tyr Arg Gly Ile Phe Pro Val  
    35                                      40                                      45  
 Leu Cys Lys Asp Pro Val Gln Glu Ala Trp Ala Glu Asp Val Asp Leu  
    50                                      55                                      60

342

Arg Val Asn Phe Ala Met Asn Val Gly Lys Ala Arg Gly Phe Phe Lys  
65 70 75 80

Lys Gly Asp Val Val Ile Val Leu Thr Gly Trp Arg Pro Gly Ser Gly  
85 90 95

Phe Thr Asn Thr Met Arg Val Val Pro Val Pro  
100 105

<210> 273

<211> 155

<212> PRT

<213> Homo sapien

<400> 273

Gly Arg Gly Pro Pro Gly Glu Leu Cys His Glu Cys Trp Gln Gly Pro  
1 5 10 15

Arg Leu Leu Gln Glu Gly Arg Cys Gly His Cys Ala Asp Arg Met Ala  
20 25 30

Pro Trp Leu Arg Leu His Gln His His Ala Cys Cys Ser Cys Ala Val  
35 40 45

Met Asp Pro Arg Ala Pro Pro Pro Ala Pro Val Pro Pro Pro Ser Pro  
50 55 60

Ser Pro Ser Ile Arg Pro Ala Thr Leu Val Glu Leu Thr Leu Gly Cys  
65 70 75 80

Asn Val Ala Leu Val Gly Trp Asp Thr Arg Glu Glu Asp Gln Arg Leu  
85 90 95

Thr Glu Thr Trp Leu Cys Leu Gln Pro Ala Leu Val Gly Gln Pro Arg  
100 105 110

Ala Trp Leu Pro Ile Met Trp Pro His Pro Ile Lys Gly Arg Arg Arg  
115 120 125

Asn Ala Gly Leu Glu Ala Pro Gly Ala Arg Trp Gln Glu Gly Asp Ser  
130 135 140

Phe Leu Ser Cys Val Tyr Ser Val Gln Phe Leu  
145 150 155

<210> 274

343

<211> 143  
<212> PRT  
<213> Homo sapien

<400> 274

Met Phe His Arg Lys Leu Phe Glu Glu Leu Val Arg Ala Ser Ser His  
1 5 10 15

Ser Thr Asp Leu Met Glu Ala Met Ala Met Gly Ser Val Glu Ala Ser  
20 25 30

Tyr Lys Cys Leu Ala Ala Ala Leu Ile Val Leu Thr Glu Ser Gly Arg  
35 40 45

Ser Ala His Gln Val Ala Arg Tyr Arg Pro Arg Ala Pro Ile Ile Ala  
50 55 60

Val Thr Arg Asn Pro Gln Thr Ala Arg Gln Ala His Leu Tyr Arg Gly  
65 70 75 80

Ile Phe Pro Val Leu Cys Lys Asp Pro Val Gln Glu Ala Trp Ala Glu  
85 90 95

Asp Val Asp Leu Arg Val Asn Phe Ala Met Asn Val Gly Lys Ala Arg  
100 105 110

Gly Phe Phe Lys Lys Gly Asp Val Val Ile Val Leu Thr Gly Trp Arg  
115 120 125

Pro Gly Ser Gly Phe Thr Asn Thr Met Arg Val Val Pro Val Pro  
130 135 140

<210> 275  
<211> 253  
<212> PRT  
<213> Homo sapien

<220>  
<221> MISC\_FEATURE  
<222> (243)..(243)  
<223> X=any amino acid

<220>  
<221> MISC\_FEATURE  
<222> (245)..(245)  
<223> X=any amino acid

<400> 275

344

Met Asp Thr Pro Pro Leu Ser Asp Ser Glu Ser Glu Ser Asp Glu Ser  
 1 5 10 15  
 Leu Val Thr Asp Arg Glu Leu Gln Asp Ala Phe Ser Arg Gly Leu Leu  
 20 25 30  
 Lys Pro Gly Leu Asn Val Val Leu Glu Gly Pro Lys Lys Ala Val Asn  
 35 40 45  
 Asp Val Asn Gly Leu Lys Gln Cys Leu Ala Glu Phe Lys Arg Asp Leu  
 50 55 60  
 Glu Trp Val Glu Arg Leu Asp Val Thr Leu Gly Pro Val Pro Glu Ile  
 65 70 75 80  
 Gly Gly Ser Glu Ala Pro Ala Pro Gln Asn Lys Asp Gln Lys Ala Val  
 85 90 95  
 Asp Pro Glu Asp Asp Phe Gln Arg Glu Met Ser Phe Tyr Arg Gln Ala  
 100 105 110  
 Gln Ala Ala Val Leu Ala Val Leu Pro Arg Leu His Gln Leu Lys Val  
 115 120 125  
 Pro Thr Lys Arg Pro Thr Asp Tyr Phe Ala Glu Met Ala Lys Ser Asp  
 130 135 140  
 Leu Gln Met Gln Lys Ile Arg Gln Lys Leu Gln Thr Lys Gln Ala Ala  
 145 150 155 160  
 Met Glu Arg Ser Glu Lys Ala Lys Gln Leu Arg Ala Leu Arg Lys Tyr  
 165 170 175  
 Gly Lys Lys Val Gln Thr Glu Val Leu Gln Lys Arg Gln Gln Glu Lys  
 180 185 190  
 Ala His Met Met Asn Ala Ile Lys Lys Tyr Gln Lys Gly Phe Ser Asp  
 195 200 205  
 Lys Leu Asp Phe Leu Glu Gly Asp Gln Lys Pro Leu Ala Gln Arg Lys  
 210 215 220  
 Lys Ala Gly Ala Lys Gly Gln Gln Met Arg Lys Gly Pro Thr Gly Pro  
 225 230 235 240  
 Gln Arg Xaa Ile Xaa Glu Lys Gly Lys Gly Ala Gln Cys

345

245

250

&lt;210&gt; 276

&lt;211&gt; 361

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 276

Met Tyr Pro Glu Ala Leu Pro Val Gly Ile Leu Ser Asn Pro Asp Thr  
 1 5 10 15

Phe Lys Arg Arg Ser Gly Ser Tyr Ser Asn Asp Lys Pro Glu Val Trp  
 20 25 30

Phe Ala Ala Gly Ser Gly Ser Pro Asn Gln Lys Leu Ser Ser Ser Cys  
 35 40 45

Val Gly Arg Ala Cys Gly Glu Met Asp Thr Pro Pro Leu Ser Asp Ser  
 50 55 60

Glu Ser Glu Ser Asp Glu Ser Leu Val Thr Asp Arg Glu Leu Gln Asp  
 65 70 75 80

Ala Phe Ser Arg Gly Leu Leu Lys Pro Gly Leu Asn Val Val Leu Glu  
 85 90 95

Gly Pro Lys Lys Ala Val Asn Asp Val Asn Gly Leu Lys Gln Cys Leu  
 100 105 110

Ala Glu Phe Lys Arg Asp Leu Glu Trp Val Glu Arg Leu Asp Val Thr  
 115 120 125

Leu Gly Pro Val Pro Glu Ile Gly Gly Ser Glu Ala Pro Ala Pro Gln  
 130 135 140

Asn Lys Asp Gln Lys Ala Val Asp Pro Glu Asp Asp Phe Gln Arg Glu  
 145 150 155 160

Met Ser Phe Tyr Arg Gln Ala Gln Ala Val Leu Ala Val Leu Pro  
 165 170 175

Arg Leu His Gln Leu Lys Val Pro Thr Lys Arg Pro Thr Asp Tyr Phe  
 180 185 190

Ala Glu Met Ala Lys Ser Asp Leu Gln Met Gln Lys Ile Arg Gln Lys  
 195 200 205

346

Leu Gln Thr Lys Gln Ala Ala Met Glu Arg Ser Glu Lys Ala Lys Gln  
 210 215 220

Leu Arg Ala Leu Arg Lys Tyr Gly Lys Lys Val Gln Thr Glu Val Leu  
 225 230 235 240

Gln Lys Arg Gln Gln Glu Lys Ala His Met Met Asn Ala Ile Lys Lys  
 245 250 255

Tyr Gln Lys Gly Phe Ser Asp Lys Leu Asp Phe Leu Glu Gly Asp Gln  
 260 265 270

Lys Pro Leu Ala Gln Arg Lys Lys Ala Gly Ala Lys Gly Gln Gln Met  
 275 280 285

Arg Lys Gly Pro Ser Ala Lys Arg Arg Tyr Lys Asn Gln Lys Phe Gly  
 290 295 300

Phe Gly Gly Lys Lys Lys Gly Ser Lys Trp Asn Thr Arg Glu Ser Tyr  
 305 310 315 320

Asp Asp Val Ser Ser Phe Arg Ala Lys Thr Ala His Gly Arg Gly Leu  
 325 330 335

Lys Arg Pro Gly Lys Lys Gly Ser Asn Lys Arg Pro Gly Lys Arg Thr  
 340 345 350

Arg Glu Lys Met Lys Asn Arg Thr His  
 355 360

<210> 277

<211> 167

<212> PRT

<213> Homo sapien

<400> 277

Met Ala Lys Ser Asp Leu Gln Met Gln Lys Ile Arg Gln Lys Leu Gln  
 1 5 10 15

Thr Lys Gln Ala Ala Met Glu Arg Ser Glu Lys Ala Lys Gln Leu Arg  
 20 25 30

Ala Leu Arg Lys Tyr Gly Lys Lys Val Gln Thr Glu Val Leu Gln Lys  
 35 40 45

Arg Gln Gln Glu Lys Ala His Met Met Asn Ala Ile Lys Lys Tyr Gln

347

50

55

60

Lys Gly Phe Ser Asp Lys Leu Asp Phe Leu Glu Gly Asp Gln Lys Pro  
 65 70 75 80

Leu Ala Gln Arg Lys Lys Ala Gly Ala Lys Gly Gln Gln Met Arg Lys  
 85 90 95

Gly Pro Ser Ala Lys Arg Arg Tyr Lys Asn Gln Lys Phe Gly Phe Gly  
 100 105 110

Gly Lys Lys Lys Gly Ser Lys Trp Asn Thr Arg Glu Ser Tyr Asp Asp  
 115 120 125

Val Ser Ser Phe Arg Ala Lys Thr Ala His Gly Arg Gly Leu Lys Arg  
 130 135 140

Pro Gly Lys Lys Gly Ser Asn Lys Arg Pro Gly Lys Arg Thr Arg Glu  
 145 150 155 160

Lys Met Lys Asn Arg Thr His  
 165

<210> 278

<211> 636

<212> PRT

<213> Homo sapien

<400> 278

Pro Arg Arg Gly Leu Arg Val Ser Ser Pro Gly Gly Pro Gly Ala Met  
 1 5 10 15

Gly Trp Val Gly Gly Arg Arg Arg Asp Ser Ala Ser Pro Pro Gly Arg  
 20 25 30

Ser Arg Ser Ala Ala Asp Asp Ile Asn Pro Ala Pro Ala Asn Met Glu  
 35 40 45

Gly Gly Gly Gly Ser Val Ala Val Ala Gly Leu Gly Ala Arg Gly Ser  
 50 55 60

Gly Ala Ala Ala Ala Thr Val Arg Glu Leu Leu Gln Asp Gly Cys Tyr  
 65 70 75 80

Ser Asp Phe Leu Asn Glu Asp Phe Asp Val Lys Thr Tyr Thr Ser Gln  
 85 90 95

348

Ser Ile His Gln Ala Val Ile Ala Glu Gln Leu Ala Lys Leu Ala Gln  
 100 105 110

Gly Ile Ser Gln Leu Asp Arg Glu Leu His Leu Gln Val Val Ala Arg  
 115 120 125

His Glu Asp Leu Leu Ala Gln Ala Thr Gly Ile Glu Ser Leu Glu Gly  
 130 135 140

Val Leu Gln Met Met Gln Thr Arg Ile Gly Ala Leu Gln Gly Ala Val  
 145 150 155 160

Asp Arg Ile Lys Ala Lys Ile Val Glu Pro Tyr Asn Lys Ile Val Ala  
 165 170 175

Arg Thr Ala Gln Leu Ala Arg Leu Gln Val Ala Cys Asp Leu Leu Arg  
 180 185 190

Arg Ile Ile Arg Ile Leu Asn Leu Ser Lys Arg Leu Gln Gly Gln Leu  
 195 200 205

Gln Gly Gly Ser Arg Glu Ile Thr Lys Ala Ala Gln Ser Leu Asn Glu  
 210 215 220

Leu Asp Tyr Leu Ser Gln Gly Ile Asp Leu Ser Gly Ile Glu Val Ile  
 225 230 235 240

Glu Asn Asp Leu Leu Phe Ile Ala Arg Ala Arg Leu Glu Val Glu Asn  
 245 250 255

Gln Ala Lys Arg Leu Leu Glu Gln Gly Leu Glu Thr Gln Asn Pro Thr  
 260 265 270

Gln Val Gly Thr Ala Leu Gln Val Phe Tyr Asn Leu Gly Thr Leu Lys  
 275 280 285

Asp Thr Ile Thr Ser Val Val Asp Gly Tyr Cys Ala Thr Leu Glu Glu  
 290 295 300

Asn Ile Asn Ser Ala Leu Asp Ile Lys Val Leu Thr Gln Pro Ser Gln  
 305 310 315 320

Ser Ala Val Arg Gly Gly Pro Gly Arg Ser Thr Met Pro Thr Pro Gly  
 325 330 335



349

Asn Thr Ala Ala Leu Arg Ala Ser Leu Trp Thr Asn Met Glu Lys Leu  
 340 345 350

Met Asp His Ile Tyr Ala Val Cys Gly Gln Val Gln His Leu Gln Lys  
 355 360 365

Val Leu Ala Lys Lys Arg Asp Pro Val Ser His Ile Cys Phe Ile Glu  
 370 375 380

Glu Ile Val Lys Asp Gly Gln Pro Glu Ile Phe Tyr Thr Phe Trp Asn  
 385 390 395 400

Ser Val Thr Gln Ala Leu Ser Ser Gln Phe His Met Ala Thr Asn Ser  
 405 410 415

Ser Met Phe Leu Lys Gln Ala Phe Glu Gly Glu Tyr Pro Lys Leu Leu  
 420 425 430

Arg Leu Tyr Asn Asp Leu Trp Lys Arg Leu Gln Gln Tyr Ser Gln His  
 435 440 445

Ile Gln Gly Asn Phe Asn Ala Ser Gly Thr Thr Asp Leu Tyr Val Asp  
 450 455 460

Leu Gln His Met Glu Asp Asp Ala Gln Asp Ile Phe Ile Pro Lys Lys  
 465 470 475 480

Pro Asp Tyr Asp Pro Glu Lys Ala Leu Lys Asp Ser Leu Gln Pro Tyr  
 485 490 495

Glu Ala Ala Tyr Leu Ser Lys Ser Leu Ser Arg Leu Phe Asp Pro Ile  
 500 505 510

Asn Leu Val Phe Pro Pro Gly Gly Arg Asn Pro Pro Ser Ser Asp Glu  
 515 520 525

Leu Asp Gly Ile Ile Lys Thr Ile Ala Ser Glu Leu Asn Val Ala Ala  
 530 535 540

Val Asp Thr Asn Leu Thr Leu Ala Val Ser Lys Asn Val Ala Lys Thr  
 545 550 555 560

Ile Gln Leu Tyr Ser Val Lys Ser Glu Gln Leu Leu Ser Thr Gln Gly  
 565 570 575

Asp Ala Ser Gln Val Ile Gly Pro Leu Thr Glu Gly Gln Arg Arg Asn

[illegible]

351

Ala	Arg	Thr	Ala	Gln	Leu	Ala	Arg	Leu	Gln	Val	Ala	Cys	Asp	Leu	Leu	165	170	175	
Arg	Arg	Ile	Ile	Arg	Ile	Leu	Asn	Leu	Ser	Lys	Arg	Leu	Gln	Gly	Gln	180	185	190	
Leu	Gln	Gly	Gly	Ser	Arg	Glu	Ile	Thr	Lys	Ala	Ala	Gln	Ser	Leu	Asn	195	200	205	
Glu	Leu	Asp	Tyr	Leu	Ser	Gln	Gly	Ile	Asp	Leu	Ser	Gly	Ile	Glu	Val	210	215	220	
Ile	Glu	Asn	Asp	Leu	Leu	Phe	Ile	Ala	Arg	Ala	Arg	Leu	Glu	Val	Glu	225	230	240	
Asn	Gln	Ala	Lys	Arg	Leu	Leu	Glu	Gln	Gly	Leu	Glu	Thr	Gln	Asn	Pro	245	250	255	
Thr	Gln	Val	Gly	Thr	Ala	Leu	Gln	Val	Phe	Tyr	Asn	Leu	Gly	Thr	Leu	260	265	270	
Lys	Asp	Thr	Ile	Thr	Ser	Val	Val	Asp	Gly	Tyr	Cys	Ala	Thr	Leu	Glu	275	280	285	
Glu	Asn	Ile	Asn	Ser	Ala	Leu	Asp	Ile	Lys	Val	Leu	Thr	Gln	Pro	Ser	290	295	300	
Gln	Ser	Ala	Val	Arg	Gly	Gly	Pro	Gly	Arg	Ser	Thr	Met	Pro	Thr	Pro	305	310	315	320
Gly	Asn	Thr	Ala	Ala	Leu	Arg	Ala	Ser	Leu	Trp	Thr	Asn	Met	Glu	Lys	325	330	335	
Leu	Met	Asp	His	Ile	Tyr	Ala	Val	Cys	Gly	Gln	Val	Gln	His	Leu	Gln	340	345	350	
Lys	Val	Leu	Ala	Lys	Lys	Arg	Asp	Pro	Val	Ser	His	Ile	Cys	Phe	Ile	355	360	365	
Glu	Glu	Ile	Val	Lys	Asp	Gly	Gln	Pro	Glu	Ile	Phe	Tyr	Thr	Phe	Trp	370	375	380	
Asn	Ser	Val	Thr	Gln	Ala	Leu	Ser	Ser	Gln	Phe	His	Met	Ala	Thr	Asn	385	390	395	400

352

Ser Ser Met Phe Leu Lys Gln Ala Phe Glu Gly Glu Tyr Pro Lys Leu  
 405 410 415

Leu Arg Leu Tyr Asn Asp Leu Trp Lys Arg Leu Gln Gln Tyr Ser Gln  
 420 425 430

His Ile Gln Gly Asn Phe Asn Ala Ser Gly Thr Thr Asp Leu Tyr Val  
 435 440 445

Asp Leu Gln His Met Glu Asp Asp Ala Gln Asp Ile Phe Ile Pro Lys  
 450 455 460

Lys Pro Asp Tyr Asp Pro Glu Lys Ala Leu Lys Asp Ser Leu Gln Pro  
 465 470 475 480

Tyr Glu Ala Ala Tyr Leu Ser Lys Ser Leu Ser Arg Leu Phe Asp Pro  
 485 490 495

Ile Asn Leu Val Phe Pro Pro Gly Gly Arg Asn Pro Pro Ser Ser Asp  
 500 505 510

Glu Leu Asp Gly Ile Ile Lys Thr Ile Ala Ser Glu Leu Asn Val Ala  
 515 520 525

Ala Val Asp Thr Asn Leu Thr Leu Ala Val Ser Lys Asn Val Ala Lys  
 530 535 540

Thr Ile Gln Leu Tyr Ser Val Lys Ser Glu Gln Leu Leu Ser Thr Gln  
 545 550 555 560

Gly Asp Ala Ser Gln Val Ile Gly Pro Leu Thr Glu Gly Gln Arg Arg  
 565 570 575

Asn Val Ala Val Val Asn Ser Leu Tyr Lys Leu His Gln Ser Val Thr  
 580 585 590

Lys Val Val Ser Ser Gln Ser Ser Phe Pro Leu Ala Ala Glu Gln Thr  
 595 600 605

Ile Ile Ser Ala Leu Lys Asp Leu Gln Tyr Ser Val Glu Tyr Glu Leu  
 610 615 620

Ala Ile His Ala Leu Met Glu Asn Ala Val Gln Pro Leu Leu Thr Ser  
 625 630 635 640

Val Gly Asp Ala Ile Glu Ala Ile Ile Ile Thr Met His Gln Glu Asp

353

645	650	655
Phe Ser Gly Ser Leu Ser Ser Ser Gly Lys Pro Asp Val Pro Cys Ser		
660	665	670
Leu Tyr Met Lys Glu Leu Gln Gly Phe Ile Ala Arg Val Met Ser Asp		
675	680	685
Tyr Phe Lys His Phe Glu Cys Leu Asp Phe Val Phe Asp Asn Thr Glu		
690	695	700
Ala Ile Ala Gln Arg Ala Val Glu Leu Phe Ile Arg His Ala Ser Leu		
705	710	715
Ile Arg Pro Leu Gly Glu Gly Gly Lys Met Arg Leu Ala Ala Asp Phe		
725	730	735
Ala Gln Met Glu Leu Ala Val Gly Pro Phe Cys Arg Arg Val Ser Asp		
740	745	750
Leu Gly Lys Ser Tyr Arg Met Leu Arg Ser Phe Arg Pro Leu Leu Phe		
755	760	765
Gln Ala Ser Glu His Val Ala Ser Ser Pro Ala Leu Gly Asp Val Ile		
770	775	780
Pro Phe Ser Ile Ile Ile Gln Phe Leu Phe Thr Arg Ala Pro Ala Glu		
785	790	795
Leu Lys Ser Pro Phe Gln Arg Ala Glu Trp Ser His Thr Arg Phe Ser		
805	810	815
Gln Trp Leu Asp Asp His Pro Ser Glu Lys Asp Arg Leu Leu Leu Ile		
820	825	830
Arg Gly Ala Leu Glu Ala Tyr Val Gln Ser Val Arg Ser Arg Glu Gly		
835	840	845
Lys Glu Phe Ala Pro Val Tyr Pro Ile Met Val Gln Leu Leu Gln Lys		
850	855	860
Ala Met Ser Ala Leu Gln		
865	870	

&lt;210&gt; 280

&lt;211&gt; 791

354

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 280

Met Gly Trp Val Gly Gly Arg Arg Arg Asp Ser Ala Ser Pro Pro Gly  
 1 5 10 15

Arg Ser Arg Ser Ala Ala Asp Asp Ile Asn Pro Ala Pro Ala Asn Met  
 20 25 30

Glu Gly Gly Gly Gly Ser Val Ala Val Ala Gly Leu Gly Ala Arg Gly  
 35 40 45

Ser Gly Ala Ala Ala Ala Thr Val Arg Glu Leu Leu Gln Asp Gly Cys  
 50 55 60

Tyr Ser Asp Phe Leu Asn Glu Asp Phe Asp Val Lys Thr Tyr Thr Ser  
 65 70 75 80

Gln Ser Ile His Gln Ala Val Ile Ala Glu Gln Leu Ala Lys Leu Ala  
 85 90 95

Gln Gly Ile Ser Gln Leu Asp Arg Glu Leu His Leu Gln Val Val Ala  
 100 105 110

Arg His Glu Asp Leu Leu Ala Gln Ala Thr Gly Ile Glu Ser Leu Glu  
 115 120 125

Gly Val Leu Gln Met Met Gln Thr Arg Ile Gly Ala Leu Gln Gly Ala  
 130 135 140

Val Asp Arg Ile Lys Ala Lys Ile Val Glu Pro Tyr Asn Lys Ile Val  
 145 150 155 160

Ala Arg Thr Ala Gln Leu Ala Arg Leu Gln Val Ala Cys Asp Leu Leu  
 165 170 175

Arg Arg Ile Ile Arg Ile Leu Asn Leu Ser Lys Arg Leu Gln Gly Gln  
 180 185 190

Leu Gln Gly Gly Ser Arg Glu Ile Thr Lys Ala Ala Gln Ser Leu Asn  
 195 200 205

Glu Leu Asp Tyr Leu Ser Gln Gly Ile Asp Leu Ser Gly Ile Glu Val  
 210 215 220

355

Ile Glu Asn Asp Leu Leu Phe Ile Ala Arg Ala Arg Leu Glu Val Glu  
 225 230 235 240

Asn Gln Ala Lys Arg Leu Leu Glu Gln Gly Leu Glu Thr Gln Asn Pro  
 245 250 255

Thr Gln Val Gly Thr Ala Leu Gln Val Phe Tyr Asn Leu Gly Thr Leu  
 260 265 270

Lys Asp Thr Ile Thr Ser Val Val Asp Gly Tyr Cys Ala Thr Leu Glu  
 275 280 285

Glu Asn Ile Asn Ser Ala Leu Asp Ile Lys Val Leu Thr Gln Pro Ser  
 290 295 300

Gln Ser Ala Val Arg Gly Gly Pro Gly Arg Ser Thr Met Pro Thr Pro  
 305 310 315 320

Gly Asn Thr Ala Ala Leu Arg Ala Ser Leu Trp Thr Asn Met Glu Lys  
 325 330 335

Leu Met Asp His Ile Tyr Ala Val Cys Gly Gln Val Gln His Leu Gln  
 340 345 350

Lys Val Leu Ala Lys Lys Arg Asp Pro Val Ser His Ile Cys Phe Ile  
 355 360 365

Glu Glu Ile Val Lys Asp Gly Gln Pro Glu Ile Phe Tyr Thr Phe Trp  
 370 375 380

Asn Ser Val Thr Gln Ala Leu Ser Ser Gln Phe His Met Ala Thr Asn  
 385 390 395 400

Ser Ser Met Phe Leu Lys Gln Ala Phe Glu Gly Glu Tyr Pro Lys Leu  
 405 410 415

Leu Arg Leu Tyr Asn Asp Leu Trp Lys Arg Leu Gln Gln Tyr Ser Gln  
 420 425 430

His Ile Gln Gly Asn Phe Asn Ala Ser Gly Thr Thr Asp Leu Tyr Val  
 435 440 445

Asp Leu Gln His Met Glu Asp Asp Ala Gln Asp Ile Phe Ile Pro Lys  
 450 455 460

Lys Pro Asp Tyr Asp Pro Glu Lys Ala Leu Lys Asp Ser Leu Gln Pro

356

465		470		475		480									
Tyr	Glu	Ala	Ala	Tyr	Leu	Ser	Lys	Ser	Leu	Ser	Arg	Leu	Phe	Asp	Pro
				485					490					495	
Ile	Asn	Leu	Val	Phe	Pro	Pro	Gly	Gly	Arg	Asn	Pro	Pro	Ser	Ser	Asp
			500					505					510		
Glu	Leu	Asp	Gly	Ile	Ile	Lys	Thr	Ile	Ala	Ser	Glu	Leu	Asn	Val	Ala
		515					520					525			
Ala	Val	Asp	Thr	Asn	Leu	Thr	Leu	Ala	Val	Ser	Lys	Asn	Val	Ala	Lys
		530				535					540				
Thr	Ile	Gln	Leu	Tyr	Ser	Val	Lys	Ser	Glu	Gln	Leu	Leu	Ser	Thr	Gln
545					550					555					560
Gly	Asp	Ala	Ser	Gln	Val	Ile	Gly	Pro	Leu	Thr	Glu	Gly	Gln	Arg	Arg
				565					570					575	
Asn	Val	Ala	Val	Val	Asn	Ser	Leu	Tyr	Lys	Leu	His	Gln	Ser	Val	Thr
			580					585					590		
Lys	Val	Val	Ser	Ser	Gln	Ser	Ser	Phe	Pro	Leu	Ala	Ala	Glu	Gln	Thr
		595					600					605			
Ile	Ile	Ser	Ala	Leu	Lys	Ala	Ile	His	Ala	Leu	Met	Glu	Asn	Ala	Val
		610				615					620				
Gln	Pro	Leu	Leu	Thr	Ser	Val	Gly	Asp	Ala	Ile	Glu	Ala	Ile	Ile	Ile
625					630					635					640
Thr	Met	His	Gln	Glu	Asp	Phe	Ser	Gly	Ser	Leu	Ser	Ser	Ser	Gly	Lys
				645					650					655	
Pro	Asp	Val	Pro	Cys	Ser	Leu	Tyr	Met	Lys	Glu	Leu	Gln	Gly	Phe	Ile
			660					665					670		
Ala	Arg	Val	Met	Ser	Asp	Tyr	Phe	Lys	His	Phe	Glu	Cys	Leu	Asp	Phe
			675				680					685			
Val	Phe	Asp	Asn	Thr	Glu	Ala	Ile	Ala	Gln	Arg	Ala	Val	Glu	Leu	Phe
		690				695					700				
Ile	Arg	His	Ala	Ser	Leu	Ile	Arg	Pro	Leu	Gly	Glu	Gly	Gly	Lys	Met
705					710					715					720



357

Arg Leu Ala Ala Asp Phe Ala Gln Met Glu Leu Ala Val Gly Pro Phe  
725 730 735

Cys Arg Arg Val Ser Asp Leu Gly Lys Ser Tyr Arg Met Leu Arg Ser  
740 745 750

Phe Arg Gly Ala Leu Glu Ala Tyr Val Gln Ser Val Arg Ser Arg Glu  
755 760 765

Gly Lys Glu Phe Ala Pro Val Tyr Pro Ile Met Val Gln Leu Leu Gln  
770 775 780

Lys Ala Met Ser Ala Leu Gln  
785 790

<210> 281  
<211> 122  
<212> PRT  
<213> Homo sapien

<400> 281

Lys Val Thr Gly Lys Ser Gln Thr Val Leu Ala Ser Gly Val Asp Glu  
1 5 10 15

Lys Gln Ala Lys Ile Ser Ser Pro Thr Glu Thr Glu Arg Cys Ile Glu  
20 25 30

Ser Leu Ile Ala Val Phe Gln Lys Tyr Ala Gly Lys Asp Gly Tyr Asn  
35 40 45

Tyr Thr Leu Ser Lys Thr Glu Phe Leu Ser Phe Met Asn Thr Glu Leu  
50 55 60

Ala Ala Phe Thr Lys Asn Gln Lys Asp Pro Gly Val Leu Asp Arg Met  
65 70 75 80

Met Lys Lys Leu Asp Thr Asn Ser Asp Gly Gln Leu Asp Phe Ser Glu  
85 90 95

Phe Leu Asn Leu Ile Gly Gly Leu Ala Met Ala Cys His Asp Ser Phe  
100 105 110

Leu Lys Ala Val Pro Ser Gln Lys Arg Thr  
115 120

358

<210> 282  
 <211> 170  
 <212> PRT  
 <213> Homo sapien

<400> 282

His Arg Pro Ser Ser Thr His Cys Asp Leu Gln Pro Ala Leu Phe Val  
 1 5 10 15

Ser Ser Leu Pro Phe Lys Arg Gln Leu Ala Leu Glu Gly His Leu Leu  
 20 25 30

Ser Ser Leu Pro Leu Asp Thr Pro Thr Lys Thr Gln Gly Glu Ala Leu  
 35 40 45

Lys Ser Asn Trp Lys Val Thr Asp Arg Ser Gly Lys Trp Ile Asp Glu  
 50 55 60

Lys Gln Ala Lys Ile Ser Ser Pro Thr Glu Thr Glu Arg Cys Ile Glu  
 65 70 75 80

Ser Leu Ile Ala Val Phe Gln Lys Tyr Ala Gly Lys Asp Gly Tyr Asn  
 85 90 95

Tyr Thr Leu Ser Lys Thr Glu Phe Leu Ser Phe Met Asn Thr Glu Leu  
 100 105 110

Ala Ala Phe Thr Lys Asn Gln Lys Asp Pro Gly Val Leu Asp Arg Met  
 115 120 125

Met Lys Lys Leu Asp Thr Asn Ser Asp Gly Gln Leu Asp Phe Ser Glu  
 130 135 140

Phe Leu Asn Leu Ile Gly Gly Leu Ala Met Ala Cys His Asp Ser Phe  
 145 150 155 160

Leu Lys Ala Val Pro Ser Gln Lys Arg Thr  
 165 170

<210> 283  
 <211> 91  
 <212> PRT  
 <213> Homo sapien

<400> 283

Met Lys Leu Glu Glu Leu Cys Leu Lys Tyr Ala Gly Lys Asp Gly Tyr  
 1 5 10 15

359

Asn Tyr Thr Leu Ser Lys Thr Glu Phe Leu Ser Phe Met Asn Thr Glu  
                   20                  25                  30

Leu Ala Ala Phe Thr Lys Asn Gln Lys Asp Pro Gly Val Leu Asp Arg  
           35                  40                  45

Met Met Lys Lys Leu Asp Thr Asn Ser Asp Gly Gln Leu Asp Phe Ser  
       50                  55                  60

Glu Phe Leu Asn Leu Ile Gly Gly Leu Ala Met Ala Cys His Asp Ser  
   65                  70                  75                  80

Phe Leu Lys Ala Val Pro Ser Gln Lys Arg Thr  
                   85                  90

<210> 284  
 <211> 66  
 <212> PRT  
 <213> Homo sapien

<400> 284

Ser Leu Cys Tyr Asn Val Leu Lys Pro Pro Tyr Tyr Arg Asn Ile Tyr  
   1                  5                  10                  15

Tyr Ile Phe Ser Ile Cys Ser Phe Ser Glu Gly Leu Trp Ile Ser Leu  
           20                  25                  30

Asn Cys Gln Ile Leu Ala Tyr Phe Cys Asp Thr Pro Ala His Phe Leu  
       35                  40                  45

Ser Leu Ile Asn Gln Gly Val Arg Cys Asp Cys His Asn Cys Tyr Val  
       50                  55                  60

Phe Gln  
   65

<210> 285  
 <211> 65  
 <212> PRT  
 <213> Homo sapien

<400> 285

Met Pro Gln Tyr Gln Thr Trp Glu Glu Phe Ser Arg Ala Ala Glu Lys  
   1                  5                  10                  15

Leu Tyr Leu Ala Asp Pro Met Lys Ala Arg Val Val Leu Lys Tyr Arg  
           20                  25                  30

360

His Ser Asp Gly Asn Leu Cys Val Lys Val Thr Asp Asp Leu Val Leu  
 35 40 45

Met Arg Leu Met Val Ala Lys Glu Ala Arg Asn Val Thr Met Glu Thr  
 50 55 60

Glu  
 65

<210> 286  
 <211> 363  
 <212> PRT  
 <213> Homo sapien

<400> 286

Ser Arg Thr Thr Ser Ser Ser Ser Ser Arg Ala Thr Trp Cys Pro Leu  
 1 5 10 15

Thr Leu Ser Glu Gly Arg Leu Pro Gly Thr Gln Thr Leu Arg Glu Gln  
 20 25 30

Asn Gly Gln Pro Glu Leu Gly Lys Pro Arg Thr Asp Phe Lys Gly Ser  
 35 40 45

Phe Trp Thr Gly Gly Gly Arg Gly Pro Phe Pro Arg Gly Thr Asn Lys  
 50 55 60

Pro Ser Val Gln Asn Glu Gly Leu Cys Cys Ala Ser Arg Arg Ala Ser  
 65 70 75 80

Trp Arg Arg Gln Pro Leu Glu Val Ser His Leu Leu Pro Lys His Pro  
 85 90 95

Gln Val Val Asp Asp His Thr Ala Lys Lys Val Ser Gly Ile Leu Lys  
 100 105 110

Arg His Leu Gln Pro Val His Phe Ser Ser Trp Tyr Gly Glu Ser Val  
 115 120 125

Ser Val Gly Ser Gln Gly Lys Leu Val Ile Ser Gly Phe Pro Pro Ala  
 130 135 140

Gly Pro His Pro Phe Gln Thr Gln Leu Thr Leu His Arg Cys Gly Gln  
 145 150 155 160

361

Pro Gly Glu Ala Ala Gly Pro Ser Lys Pro Leu Thr Gln Asn Arg Trp  
 165 170 175

Ser Ser Ala Pro Phe Tyr Arg Lys Ser Gly Val Leu Glu Val Thr Cys  
 180 185 190

Ser Arg Ser His Ile Arg Val Pro Ile Arg Val Trp Val Ser Pro Lys  
 195 200 205

Leu Pro Glu Ala Gln Thr Thr His Pro Arg Ser Arg Gly Arg Ile Ser  
 210 215 220

Glu Ala Ser Cys Cys Pro Gln Gly Arg Asn Leu Gln Ser Cys Gly Glu  
 225 230 235 240

Pro Glu Cys Pro Val Asn Leu Gln Gln Arg Lys Ala Met Ser Val Trp  
 245 250 255

Gly Asp Pro Trp Asn Pro Cys His Pro Gly Pro Ser Ser Thr Phe Gln  
 260 265 270

Ala Ala Pro Ala Thr Gly Glu Ala Thr Leu Lys Leu Asp Leu Gln Leu  
 275 280 285

Gly Asp Thr Asp Glu Leu Gly Lys Leu Gln Arg His Pro Leu Gly Gly  
 290 295 300

Ala Leu Glu Ala Asp Arg Glu Thr Glu Ala Gln Ala His Cys Arg His  
 305 310 315 320

Arg Ala Leu Leu Cys Leu Ser His Ser His Ser Ser Trp Asn Gly Gly  
 325 330 335

Glu Glu Gly Asn Ser Ala His Val Pro Phe Leu Val Glu Lys Met Phe  
 340 345 350

Phe Ser Lys Leu Pro Ser Val Ala Ile Gln His  
 355 360

&lt;210&gt; 287

&lt;211&gt; 116

&lt;212&gt; PRT

&lt;213&gt; Homo sapien

&lt;400&gt; 287

Cys Pro Gly Ser Ser Phe His Glu Ser His Asn Ser His Phe Leu Leu  
 1 5 10 15

362

Gly Arg Lys Tyr Phe Tyr Ile Asn Ser Glu Lys Leu Gln Lys Cys Ile  
                   20                  25                  30

Phe Thr Asn Leu Gly Glu Val Glu Val Pro Gly Val Ser Pro Arg Phe  
           35                  40                  45

Ser Gln Leu Cys Ser Val Met Gln Val Ser Ala Arg Val Pro Val Cys  
       50                  55                  60

Pro Leu Arg Gly Glu Arg Arg Leu Ala Cys Ala Ser Thr Pro Leu Pro  
   65                  70                  75                  80

Ile Gln Ala His Ser Pro Pro Phe Pro Cys Pro Ile Ser Val Gln Gln  
                   85                  90                  95

Val Ile Glu Asn His Ile Leu Lys Leu Phe Gln Ser Asn Leu Val Pro  
                   100                  105                  110

Ala Asp Pro Glu  
       115

<210> 288  
 <211> 166  
 <212> PRT  
 <213> Homo sapien

<400> 288

Pro His Gly Gln Lys Ser Gln Trp His Pro Gln Thr Ser Pro Ser Ala  
   1                  5                  10                  15

Gly Pro Leu Gln Gln Leu Val Trp Gly Lys Ser Glu Ala Ser Cys Cys  
           20                  25                  30

Pro Gln Gly Arg Asn Leu Gln Ser Cys Gly Glu Pro Glu Cys Pro Val  
       35                  40                  45

Asn Leu Gln Gln Arg Lys Ala Met Ser Val Trp Gly Asp Pro Trp Asn  
       50                  55                  60

Pro Cys His Pro Gly Pro Ser Ser Thr Phe Gln Ala Ala Pro Ala Thr  
   65                  70                  75                  80

Gly Glu Ala Thr Leu Lys Leu Asp Leu Gln Leu Gly Asp Thr Asp Glu  
           85                  90                  95

363

Leu Gly Lys Leu Gln Arg His Pro Leu Gly Gly Ala Leu Glu Ala Asp  
 100 105 110

Arg Glu Thr Glu Ala Gln Ala His Cys Arg His Arg Ala Leu Leu Cys  
 115 120 125

Leu Ser His Ser His Ser Ser Trp Asn Gly Gly Glu Glu Gly Asn Ser  
 130 135 140

Ala His Val Pro Phe Leu Val Glu Lys Met Phe Phe Ser Lys Leu Pro  
 145 150 155 160

Ser Val Ala Ile Gln His  
 165

<210> 289  
 <211> 207  
 <212> PRT  
 <213> Homo sapien

<400> 289

Ala Ser Pro Leu Arg Ala Ala Leu Gly Leu Arg Ser Leu Val Cys Ala  
 1 5 10 15

Leu Val Arg Pro Pro Val Leu Ser Thr Arg Ala Trp Pro Pro Asp Asp  
 20 25 30

Ala Gly Ala Ala Arg Ala Gly Arg Gly Ser Leu Arg Ser Leu Leu Pro  
 35 40 45

Ser Ala Gly Pro Leu Arg Arg Ser Pro Gln Phe Pro Ala Arg Thr Arg  
 50 55 60

Ser Gly Pro Pro Asn Leu Arg Pro Lys Ser Gly Gly Gly Ser Gly Gly  
 65 70 75 80

Lys Lys Met Lys Asn Glu Ile Ala Ala Val Val Phe Phe Phe Thr Arg  
 85 90 95

Leu Val Arg Lys His Asp Lys Leu Lys Lys Glu Ala Val Glu Arg Phe  
 100 105 110

Ala Glu Lys Leu Thr Leu Ile Leu Gln Glu Lys Tyr Lys Asn His Trp  
 115 120 125

Tyr Pro Glu Lys Pro Ser Lys Gly Gln Ala Tyr Arg Cys Ile Arg Val  
 130 135 140

364

Asn Lys Phe Gln Arg Val Asp Pro Asp Val Leu Lys Ala Cys Glu Asn  
 145 150 155 160

Ser Cys Ile Leu Tyr Ser Asp Leu Gly Leu Pro Lys Glu Leu Thr Leu  
 165 170 175

Trp Val Asp Pro Cys Glu Val Cys Cys Arg Tyr Gly Glu Lys Asn Asn  
 180 185 190

Ala Phe Ile Val Ala Ser Phe Glu Asn Lys Asp Glu Gly Tyr Leu  
 195 200 205

<210> 290  
 <211> 352  
 <212> PRT  
 <213> Homo sapien

<400> 290

Met Ala Val Trp Ser Pro Leu Val Met Pro Gly Arg Arg Glu Gly Cys  
 1 5 10 15

Cys His Thr Pro Val Thr Asn Glu Glu Thr Glu Ala Arg Glu Ala Lys  
 20 25 30

Gly Gln Lys Leu Arg Pro Cys His Thr Leu Gly Val His Val Cys Leu  
 35 40 45

Ser Leu Phe Arg Ser Glu Leu Leu Gly Leu Leu Lys Thr Tyr Asn Cys  
 50 55 60

Tyr His Glu Gly Lys Ser Phe Gln Leu Arg His Arg Glu Glu Glu Gly  
 65 70 75 80

Thr Leu Ile Ile Glu Gly Leu Leu Asn Ile Ala Trp Gly Leu Arg Arg  
 85 90 95

Pro Ile Arg Leu Gln Met Gln Asp Asp Arg Glu Gln Val His Leu Pro  
 100 105 110

Ser Thr Ser Trp Met Pro Arg Arg Pro Ser Cys Pro Leu Lys Glu Pro  
 115 120 125

Ser Pro Gln Asn Gly Asn Ile Thr Ala Gln Gly Pro Ser Ile Gln Pro  
 130 135 140



365

Val His Lys Ala Glu Ser Ser Thr Asp Ser Ser Gly Pro Leu Glu Glu  
 145 150 155 160

Ala Glu Glu Ala Pro Gln Leu Met Arg Thr Lys Ser Asp Ala Ser Cys  
 165 170 175

Met Ser Gln Arg Arg Pro Lys Cys Arg Ala Pro Gly Glu Ala Gln Arg  
 180 185 190

Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr Asn His Lys  
 195 200 205

Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn Val Arg Val  
 210 215 220

Asn Ser Thr Met Thr Thr Leu Gln Val Leu Thr Leu Leu Leu Asn Lys  
 225 230 235 240

Phe Arg Val Glu Asp Gly Pro Ser Glu Phe Ala Leu Tyr Ile Val His  
 245 250 255

Glu Ser Gly Glu Arg Thr Lys Leu Lys Asp Cys Glu Tyr Pro Leu Ile  
 260 265 270

Ser Arg Ile Leu His Gly Pro Cys Glu Lys Ile Ala Arg Ile Phe Leu  
 275 280 285

Met Glu Ala Asp Leu Gly Val Glu Val Pro His Glu Val Ala Gln Tyr  
 290 295 300

Ile Lys Phe Glu Met Pro Val Leu Asp Ser Phe Val Glu Lys Leu Lys  
 305 310 315 320

Glu Glu Glu Glu Arg Glu Ile Ile Lys Leu Thr Met Lys Phe Gln Ala  
 325 330 335

Leu Arg Leu Thr Met Leu Gln Arg Leu Glu Gln Leu Val Glu Ala Lys  
 340 345 350

<210> 291

<211> 261

<212> PRT

<213> Homo sapien

<400> 291

Met Ala Val Trp Ser Pro Leu Val Met Pro Gly Arg Arg Glu Gly Cys  
 1 5 10 15

366

Cys His Thr Pro Val Thr Asn Glu Glu Thr Glu Ala Arg Glu Ala Lys  
 20 25 30

Gly Gln Lys Leu Arg Pro Cys His Thr Leu Gly Val His Val Cys Leu  
 35 40 45

Ser Leu Phe Arg Ser Glu Leu Leu Gly Leu Leu Lys Thr Tyr Asn Cys  
 50 55 60

Tyr His Glu Gly Lys Ser Phe Gln Leu Arg His Arg Glu Glu Glu Gly  
 65 70 75 80

Thr Leu Ile Ile Glu Gly Leu Leu Asn Ile Ala Trp Gly Leu Arg Arg  
 85 90 95

Pro Ile Arg Leu Gln Met Gln Asp Asp Arg Glu Gln Val His Leu Pro  
 100 105 110

Ser Thr Ser Trp Met Pro Arg Arg Pro Ser Cys Pro Leu Lys Glu Pro  
 115 120 125

Ser Pro Gln Asn Gly Asn Ile Thr Ala Gln Gly Pro Ser Ile Gln Pro  
 130 135 140

Val His Lys Ala Glu Ser Ser Thr Asp Ser Ser Gly Pro Leu Glu Glu  
 145 150 155 160

Ala Glu Glu Ala Pro Gln Leu Met Arg Thr Lys Ser Asp Ala Ser Cys  
 165 170 175

Met Ser Gln Arg Arg Pro Lys Cys Arg Ala Pro Gly Glu Ala Gln Arg  
 180 185 190

Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr Asn His Lys  
 195 200 205

Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn Val Arg Val  
 210 215 220

Asn Ser Thr Met Thr Thr Leu Gln Val Leu Thr Leu Leu Leu Asn Lys  
 225 230 235 240

Phe Arg Val Glu Asp Gly Pro Ser Glu Phe Ala Leu Tyr Ile Val His  
 245 250 255

367

Glu Ser Gly Gly Phe  
260

<210> 292  
<211> 269  
<212> PRT  
<213> Homo sapien  
  
<400> 292

Met Ala Val Trp Ser Pro Leu Val Met Pro Gly Arg Arg Glu Gly Cys  
1 5 10 15

Cys His Thr Pro Val Thr Asn Glu Glu Thr Glu Ala Arg Glu Ala Lys  
20 25 30

Gly Gln Lys Leu Arg Pro Cys His Thr Leu Gly Val His Val Cys Leu  
35 40 45

Ser Leu Phe Arg Ser Glu Leu Leu Gly Leu Leu Lys Thr Tyr Asn Cys  
50 55 60

Tyr His Glu Gly Lys Ser Phe Gln Leu Arg His Arg Glu Glu Glu Gly  
65 70 75 80

Thr Leu Ile Ile Glu Gly Leu Leu Asn Ile Ala Trp Gly Leu Arg Arg  
85 90 95

Pro Ile Arg Leu Gln Met Gln Asp Asp Arg Glu Gln Val His Leu Pro  
100 105 110

Ser Thr Ser Trp Met Pro Arg Arg Pro Ser Cys Pro Leu Lys Glu Pro  
115 120 125

Ser Pro Gln Asn Gly Asn Ile Thr Ala Gln Gly Pro Ser Ile Gln Pro  
130 135 140

Val His Lys Ala Glu Ser Ser Thr Asp Ser Ser Gly Pro Leu Glu Glu  
145 150 155 160

Ala Glu Glu Ala Pro Gln Leu Met Arg Thr Lys Ser Asp Ala Ser Cys  
165 170 175

Met Ser Gln Arg Arg Pro Lys Cys Arg Ala Pro Gly Glu Ala Gln Arg  
180 185 190

Ile Arg Arg His Arg Phe Ser Ile Asn Gly His Phe Tyr Asn His Lys

368

195

200

205

Thr Ser Val Phe Thr Pro Ala Tyr Gly Ser Val Thr Asn Val Arg Val  
 210 215 220

Asn Ser Thr Met Thr Thr Leu Gln Val Leu Thr Leu Leu Leu Asn Lys  
 225 230 235 240

Phe Arg Val Glu Asp Gly Pro Ser Glu Phe Ala Leu Tyr Ile Val His  
 245 250 255

Glu Ser Gly Glu Asp Arg Gln Asp Leu Pro Asp Gly Ser  
 260 265

<210> 293  
 <211> 133  
 <212> PRT  
 <213> Homo sapien

<400> 293

Met Arg Ser Ser Leu Leu Ser Ala Ile Thr Leu Pro Gln Cys Pro Arg  
 1 5 10 15

Leu Leu Ser Leu Gln Tyr His Pro Val Ser Leu Ala Gln Leu Ser Pro  
 20 25 30

Asn Thr Glu Val Arg Pro Gly Ile Arg Pro Gln Val Ser His Phe Leu  
 35 40 45

Cys Arg Asn Gln Ser Leu Leu His Gln Arg Asp Leu Lys Arg Phe Leu  
 50 55 60

Gln Gly Ala Cys Cys Lys Lys His Gly His Ser Ile Thr Leu Arg Arg  
 65 70 75 80

Val His Met Ala Leu Arg Gly Cys Cys Pro Leu Asn Ala Gln Gln Gln  
 85 90 95

Leu Trp Lys Ala Val Leu Ser Pro Ile Thr Thr Val Pro Trp Met Pro  
 100 105 110

Val Tyr Leu Leu Pro Phe Leu Gly Leu Arg Phe Ser Pro Leu Val Gly  
 115 120 125

Gly Asp Asp Phe Gln  
 130

369

<210> 294  
 <211> 163  
 <212> PRT  
 <213> Homo sapien

<400> 294

Trp Val His Ser Thr Tyr Arg Val Asp Ala Glu Ala Gln His Lys Glu  
 1 5 10 15

Gly Cys Arg Ile Gly Tyr Gly Arg Ile Trp Ala Glu Thr Trp Ala Ser  
 20 25 30

Arg Ser Leu Leu Tyr Arg Pro Val His Ser Ser Val Leu Leu Ser Val  
 35 40 45

Leu Glu Ser Ala Ile Glu Met Thr Thr Leu Cys Ser Asp Ala Leu Cys  
 50 55 60

Ser Pro Gln Pro Gly Leu Thr Ala Pro His Glu Ala Gln Ala Thr Ala  
 65 70 75 80

Phe Pro Leu Leu Gly Arg Gly Glu Met Arg Leu Leu Gln Gly Ser Pro  
 85 90 95

Glu Leu Ala Ile Cys Arg Ser Leu Ala Leu Leu Pro Thr Ser Leu Pro  
 100 105 110

Cys Leu Ala Ser Val Ser Pro Leu Gly Asp Val Ser Leu Gln Val Pro  
 115 120 125

Ser Pro Ala Ser Asp Asp Ala Ala Ala Pro Gly Ala Ala Gly Gly Gly  
 130 135 140

Gln Val Thr Gly Gln His Leu Pro Leu Pro Lys Ser Pro Ala Val Ala  
 145 150 155 160

Gly Val His

<210> 295  
 <211> 491  
 <212> PRT  
 <213> Homo sapien

<400> 295

Met Ala Leu Leu Val Leu Gly Leu Val Ser Cys Thr Phe Phe Leu Ala  
 1 5 10 15

370

Val Asn Gly Leu Tyr Ser Ser Ser Asp Asp Val Ile Glu Leu Thr Pro  
 20 25 30

Ser Asn Phe Asn Arg Glu Val Ile Gln Ser Asp Ser Leu Trp Leu Val  
 35 40 45

Glu Phe Tyr Ala Pro Trp Cys Gly His Cys Gln Arg Leu Thr Pro Glu  
 50 55 60

Trp Lys Lys Ala Ala Thr Ala Leu Lys Asp Val Val Lys Val Gly Ala  
 65 70 75 80

Val Asp Ala Asp Lys His His Ser Leu Gly Gly Gln Tyr Gly Val Gln  
 85 90 95

Gly Phe Pro Thr Ile Lys Ile Phe Gly Ser Asn Lys Asn Arg Pro Glu  
 100 105 110

Asp Tyr Gln Gly Gly Arg Thr Gly Glu Ala Ile Val Asp Ala Ala Leu  
 115 120 125

Ser Ala Leu Arg Gln Leu Val Lys Asp Arg Leu Gly Gly Arg Ser Gly  
 130 135 140

Gly Tyr Ser Ser Gly Lys Gln Gly Arg Ser Asp Ser Ser Ser Lys Lys  
 145 150 155 160

Asp Val Ile Glu Leu Thr Asp Asp Ser Phe Asp Lys Asn Val Leu Asp  
 165 170 175

Ser Glu Asp Val Trp Met Val Glu Phe Tyr Ala Pro Trp Cys Gly His  
 180 185 190

Cys Lys Asn Leu Glu Pro Glu Trp Ala Ala Ala Ala Ser Glu Val Lys  
 195 200 205

Glu Gln Thr Lys Gly Lys Val Lys Leu Ala Ala Val Asp Ala Thr Val  
 210 215 220

Asn Gln Val Leu Ala Ser Arg Tyr Gly Ile Arg Gly Phe Pro Thr Ile  
 225 230 235 240

Lys Ile Phe Gln Lys Gly Glu Ser Pro Val Asp Tyr Asp Gly Gly Arg  
 245 250 255

371

Thr Arg Ser Asp Ile Val Ser Arg Ala Leu Asp Leu Phe Ser Asp Asn  
 260 265 270

Ala Pro Pro Pro Glu Leu Leu Glu Ile Ile Asn Glu Asp Ile Ala Lys  
 275 280 285

Arg Thr Cys Glu Glu His Gln Leu Cys Val Val Ala Val Leu Pro His  
 290 295 300

Ile Leu Asp Thr Gly Ala Ala Gly Arg Asn Ser Tyr Leu Glu Val Leu  
 305 310 315 320

Leu Lys Leu Ala Asp Lys Tyr Lys Lys Lys Met Trp Gly Trp Leu Trp  
 325 330 335

Thr Glu Ala Gly Ala Gln Ser Glu Leu Glu Thr Ala Leu Gly Ile Gly  
 340 345 350

Gly Phe Gly Tyr Pro Ala Met Ala Ala Ile Asn Ala Arg Lys Met Lys  
 355 360 365

Phe Ala Leu Leu Lys Gly Ser Phe Ser Glu Gln Gly Ile Asn Glu Phe  
 370 375 380

Leu Arg Glu Leu Ser Phe Gly Arg Gly Ser Thr Ala Pro Val Gly Gly  
 385 390 395 400

Gly Ala Phe Pro Thr Ile Val Glu Arg Glu Pro Trp Asp Gly Arg Asp  
 405 410 415

Gly Glu Glu Cys Pro Gly Gly Lys Leu Cys Gly Gln Gln Ser Trp Phe  
 420 425 430

Thr Leu Leu Ser Leu Cys Ile Ser Ala Pro Gly Val Lys Ser Phe Pro  
 435 440 445

Ser Asp Leu Ser Pro Gly Ala Pro Val Gly Leu Leu Arg Gly Ser Ser  
 450 455 460

Leu Lys Thr Leu His Leu Pro Tyr His Lys Phe Lys Cys Cys Met Ala  
 465 470 475 480

Phe Asp Thr Leu Asp Ser Gln Asp Thr Phe Gln  
 485 490

372

<210> 296  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 296  
tcctcaaggg ccctcccag

20

<210> 297  
<211> 25  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 297  
ccacagccat ctctccata ttctg

25

<210> 298  
<211> 27  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 298  
aagtgttctt ctggatgacc tacctgg

27

<210> 299  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 299  
ctgaagccga gctcaaaggt

20

<210> 300  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 300  
ccctgctccc acttgagatc

20

<210> 301



373

<211> 24  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 301  
tgtgaaaagg aggctgggtg ccag

24

<210> 302  
<211> 22  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 302  
agtgagaggg tgggcatgta tg

22

<210> 303  
<211> 21  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 303  
tactccaggc gctctgagga t

21

<210> 304  
<211> 26  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 304  
ttagccagtg gcctccactc tgtccc

26

<210> 305  
<211> 21  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 305  
tccagatggc tcagcttctt c

21

<210> 306  
<211> 23

374

<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 306  
gaagggtgttc ggagaatgag tga

23

<210> 307  
<211> 29  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 307  
tttcttctgt ggctctgtgt tttccaggc

29

<210> 308  
<211> 18  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 308  
cctgccgcgg agatccat

18

<210> 309  
<211> 19  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 309  
gcagcgcgta ctggtcgta

19

<210> 310  
<211> 23  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 310  
cctactccgt gtcagtgggtg gag

23

<210> 311  
<211> 19  
<212> DNA

375

<213> Artificial sequence

<220>

<223> Synthetic

<400> 311

agaggcgccc ccgcaggta

19

<210> 312

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic

<400> 312

cccggagcca gctcgagtt

19

<210> 313

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic

<400> 313

caggaactgc ggcgagcgac cc

22

<210> 314

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic

<400> 314

tgcccagctg tggtttacat ta

22

<210> 315

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic

<400> 315

caccacctcg ccattctca

19

<210> 316

<211> 24

<212> DNA

<213> Artificial sequence

376

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 316

ttcactgtga acatcatctt ggca

24

&lt;210&gt; 317

&lt;211&gt; 25

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 317

gctcaaagcg tgagtaaaat atcct

25

&lt;210&gt; 318

&lt;211&gt; 28

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 318

ccacacttac tttgtaacat gattcaga

28

&lt;210&gt; 319

&lt;211&gt; 40

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 319

tttgacttaa tacttcttta attgatgtgc cttgagttgg

40

&lt;210&gt; 320

&lt;211&gt; 19

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 320

ggcggtgact catcaacga

19

&lt;210&gt; 321

&lt;211&gt; 26

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

377

<220>  
<223> Synthetic

<400> 321  
cattgacgat tattattcac aaagca 26

<210> 322  
<211> 28  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 322  
gcggccagag aatgtgtctg tgaaaact 28

<210> 323  
<211> 27  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 323  
cctttttatc cacttacaga tcaacca 27

<210> 324  
<211> 23  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 324  
acaagcaaga tgcattgtgag tga 23

<210> 325  
<211> 19  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 325  
atgggttcgct gctgccgtt 19

<210> 326  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>

378

&lt;223&gt; Synthetic

&lt;400&gt; 326

cctcacttcg cagctttgct

20

&lt;210&gt; 327

&lt;211&gt; 25

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 327

ctggcattga cgattattat tcaca

25

&lt;210&gt; 328

&lt;211&gt; 32

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 328

ctgtgaaaac tacaagctgg ccgtaaactg ct

32

&lt;210&gt; 329

&lt;211&gt; 23

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 329

ggagccctga gcattgtaat atg

23

&lt;210&gt; 330

&lt;211&gt; 19

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

&lt;400&gt; 330

ccctggtagc cgggtagag

19

&lt;210&gt; 331

&lt;211&gt; 22

&lt;212&gt; DNA

&lt;213&gt; Artificial sequence

&lt;220&gt;

&lt;223&gt; Synthetic

379

<400> 331  
cagatggtgt gccaaactgct gt 22

<210> 332  
<211> 20  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 332  
cgcctgaccc gactgtctta 20

<210> 333  
<211> 23  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 333  
gctcagattc tggctccaag tct 23

<210> 334  
<211> 21  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 334  
cctacagcaa agcgcccccc a 21

<210> 335  
<211> 18  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 335  
cctgcagccc agagcaat 18

<210> 336  
<211> 22  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

380

<400> 336  
gctcagattc tggctccaag tc 22

<210> 337  
<211> 21  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 337  
atctccaacc ctcccgttc t 21

<210> 338  
<211> 24  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 338  
tcattggctt tggatattca gaag 24

<210> 339  
<211> 23  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 339  
gttcaggaag caaagatcaa tgc 23

<210> 340  
<211> 26  
<212> DNA  
<213> Artificial sequence

<220>  
<223> Synthetic

<400> 340  
agcaatgaag ggtttggttg tagaag 26